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Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8374	19143	32140	1.34	3.1E-01	AW963549.1	EST_HUMAN	RC3-HN0001-310300-011-504 HN0001 Homo sapiens cDNA
8439	19207	32203	1.01	3.1E-01	AI204458.1	EST_HUMAN	q39c01.x1 NCL CGAP_Co8 Homo sapiens cDNA clone IMAGE:1874689 3'
6583	19346	32360	3.91	3.1E-01	X71887.1	NT	H.sapiens gene for immunoglobulin kappa light chain variable region A8 and A9
6873	25061	30545	2.41	3.1E-01	BE737382.1	EST_HUMAN	601306121F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3640420 5'
7579	20248	33354	0.77	3.1E-01	4885390	NT	Homo sapiens hyaluronan synthase 2 (HAS2), mRNA
8546	21238	34381	1.71	3.1E-01	R45318.1	EST_HUMAN	y94601.s1 Soares Infant brain T1N18 Homo sapiens cDNA clone IMAGE:35639 3'
9802	22463	35655	0.54	3.1E-01	6678322	NT	Mus musculus phosphatidylcholine 4-phosphate 5-kinase, type 1 gamma (Pip5k1c), mRNA
9867	22815	35818	1.05	3.1E-01	BF666639.1	EST_HUMAN	602124743F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:4281611 5'
9867	22815	35819	1.05	3.1E-01	BF666639.1	EST_HUMAN	602124743F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:4281611 5'
10029	22877	35893	1.74	3.1E-01	AI244001.1	EST_HUMAN	q81e11.x1 NCL CGAP_K43 Homo sapiens cDNA clone IMAGE:1863980 3' similar to gb:S55700 HYDROXYMETHYLGLUTARYL-COA LYASE PRECURSOR (HUMAN);
10201	22849		0.83	3.1E-01	T56325.1	EST_HUMAN	y64708.s1 Stragans fetal spleen (8037205) Homo sapiens cDNA clone IMAGE:74367 3' similar to similar to gb:M61036_mae2 HEMOGLOBIN GAMMA-A AND GAMMA-G CHAINS (HUMAN)
10741	23428	36672	1.26	3.1E-01	BF216117.1	EST_HUMAN	601883592F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4095814 5'
11524	24124	37430	2.56	3.1E-01	7862291	NT	Homo sapiens KIAA0764 gene product (KIAA0764), mRNA
12133	24623		1.48	3.1E-01	AF294308.1	NT	Anolis opalinus islet 1 QS NADH dehydrogenase subunit 2 (ND2) gene, complete cds, mitochondrial gene for mitochondrial product
12165	24647		3.03	3.1E-01	AF304162.1	NT	Sitostation vitreum 40S ribosomal protein S11 mRNA, partial cds
12304	24729		2.82	3.1E-01	AF166953.1	NT	Homo sapiens membrane-bound aminopeptidase P (XNPEP2) gene, complete cds
12680	24980		3.46	3.1E-01	AF198779.1	NT	Homo sapiens transcription factor IGHM enhancer 3, JM11 protein, JM5 protein, T54 protein, JM10 protein, A4 differentiation-dependent protein, triple LIM domain protein 6, and synaptohyalin genes, complete cds; and L-type calcium channel $\alpha$
12696	25347		1.35	3.1E-01	10946623	NT	Mus musculus peptidoglycan recognition protein-like (Pglyrp-pending), mRNA
70	15512	25533	2.01	3.0E-01	6755083	NT	Mus musculus protein kinase C, epsilon (Plice), mRNA
247	13058	25698	14.82	3.0E-01	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
1202	13654	26618	2.51	3.0E-01	AW300400.1	EST_HUMAN	x63f08.x1 NCL CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2774343 3'
1497	14244	26830	6.57	3.0E-01	AJ006755.1	NT	Balaenoptera physalus gene encoding atrial natriuretic peptide
2132	14862	27592	1.2	3.0E-01	AF237778.1	NT	Rattus norvegicus Ca2+/calmodulin-dependent protein kinase II, alpha subunit mRNA, 3' untranslated region
3206	15989		1.18	3.0E-01	AB030481.1	NT	Corynebacterium sp. ALY-1 slyPG gene for polyglutamate lyase, complete cds
3846	16597	29234	1.46	3.0E-01	AW817785.1	EST_HUMAN	PM1-ST0282-281199-001-g01 ST0282 Homo sapiens cDNA
4477	17212	29837	1.95	3.0E-01	AJ008765.1	NT	Balaenoptera physalus gene encoding atrial natriuretic peptide
5267	18073	30702	7.22	3.0E-01	BE741829.1	EST_HUMAN	60150400F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3948734 5'
5349	18152	30833	0.77	3.0E-01	AF229247.1	NT	Canis lupus familiaris hemagglutinin gene, complete cds

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5417	18216	30924	3.94	3.0E-01	BE683575.1	EST_HUMAN	RC3-BT0333-180700-111-a03 BT0333 Homo sapiens cDNA
5417	18216	30925	3.94	3.0E-01	BE683575.1	EST_HUMAN	RC3-BT0333-180700-111-a03 BT0333 Homo sapiens cDNA
5453	18252	31142	4.77	3.0E-01	U01247.1	NT	Mus musculus 120kD Clara cell 10 kd protein (mCC10) gene, complete cds
6732	19566	32598	3.06	3.0E-01	D16313.1	NT	Mouse cyokeratin 15 gene, complete cds
6762	17931	30567	0.61	3.0E-01	U02390.1	NT	Strongylocentrotus purpuratus 34/67 kDa laminin-binding protein mRNA, partial cds
6827	19498	32510	0.85	3.0E-01	AF229247.1	NT	Cantagalo orthopoxvirus hemagglutinin gene, complete cds
7021	19713	32770	0.71	3.0E-01	AL169209.2	NT	Homo sapiens chromosome 21 segment HS21C006
7227	18912	32985	2.77	3.0E-01	10847007	NT	Mus musculus midbrain (Mch-pending), mRNA
7400	20078	33159	1.37	3.0E-01	AF071810.1	NT	Streptococcus pneumoniae strain DBL6 PepA (pepA) gene, partial cds
7827	20522	33648	1.3	3.0E-01	AE001755.1	NT	Thermotoga maritima section 07 of 136 of the complete genome
8271	20965		2.97	3.0E-01	9910161	NT	Mus musculus C-type (calcium dependent, carbohydrate recognition domain) lectin, superfamily member 9 (Clec3f), mRNA
8374	21067	34207	1.32	3.0E-01	BE566063.1	EST_HUMAN	601333079F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3981594 5'
8728	21420	34584	0.51	3.0E-01	AF141676.1	NT	Streptomyces sulfonolactans isopenicillin N synthase (pcbC) gene, partial cds
8770	21462		0.8	3.0E-01	7661685	NT	Homo sapiens DKFZP586M0122 protein (DKFZP586M0122), mRNA
9118	21806	34972	0.81	3.0E-01	AF220507.1	NT	Anabaena PCC7120 cytochrome-specific DNA methyltransferase (dmrB) gene, complete cds; putative anthranilate phosphoribosyltransferase gene, partial cds; and unknown gene
9856	22506		43.84	3.0E-01	BE001129.1	EST_HUMAN	RC2-BN0074-240400-110-112 BN0074 Homo sapiens cDNA
9868	22518	35714	1.25	3.0E-01	BF574612.1	EST_HUMAN	602133271F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4288338 5'
10042	22690	35808	0.49	3.0E-01	AF162598.3	NT	Actinobacillus actinomycetemcomitans Tada (tada), Tadb (tadb), Tadc (tadc), Tadd (tadd), Tade (tade), Tadf (tadf), and Tadv (tadv) genes, complete cds
10042	22690	35909	0.49	3.0E-01	AF152598.3	NT	Actinobacillus actinomycetemcomitans Tada (tada), Tadb (tadb), Tadc (tadc), Tadd (tadd), Tade (tade), Tadf (tadf), and Tadv (tadv) genes, complete cds
10294	22941	36155	0.84	3.0E-01	AW118111.1	EST_HUMAN	xc03d10.XT Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2606035 3'
10296	22943	36157	1.88	3.0E-01	AB030231.1	NT	Aspergillus oryzae bpa gene for ER chaperone BIP, complete cds
10316	22963	36179	0.73	3.0E-01	BF683841.1	EST_HUMAN	602140133F1 NIH_MGC_48 Homo sapiens cDNA clone IMAGE:4301097 5'
10316	22963	36180	0.73	3.0E-01	BF683841.1	EST_HUMAN	602140133F1 NIH_MGC_46 Homo sapiens cDNA clone IMAGE:4301097 5'
11772	24363	37694	1.95	3.0E-01	H51029.1	EST_HUMAN	yp84b10.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:194107 5'
11772	24363	37695	1.95	3.0E-01	H51029.1	EST_HUMAN	yp84b10.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:194107 5'
12416	25302		2.52	3.0E-01	AJ297031.1	NT	Rattus norvegicus mRNA for glyceraldehyde-3-phosphate dehydrogenase type 2 (gapdh-2 gene)
12693	25345		5.51	3.0E-01	6677766	NT	Mus musculus ribose 5-phosphate isomerase A (Rpl), mRNA
2018	14753	27481	1.43	2.9E-01	AE000736.1	NT	Aquifex aeolicus section 88 of 109 of the complete genome
2245	14973	27710	1.18	2.9E-01	AF222718.1	NT	Chrysodidymus synuroideus mitochondrion, complete genome
3246	16008	28658	2.73	2.9E-01	AW754239.1	EST_HUMAN	PM1-CT0326-171299-001-f12 CT0326 Homo sapiens cDNA



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3246	16008	28659	2.73	2.9E-01	AW754239.1	EST_HUMAN	PM1-CT0328-171299-001-f12 CT0328 Homo sapiens cDNA
3877	18627	29285	0.72	2.9E-01	A1610836.1	EST_HUMAN	tp21a11.x1 NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2188412 3' similar to gb:D15050 NIL-2-A
4052	16797	29427	0.73	2.9E-01	AB016426.1	NT	ZINC FINGER PROTEIN (HUMAN); contains element L1 repetitive element;
4064	18808		0.77	2.9E-01	AW002902.1	EST_HUMAN	Cavia porcellus mRNA for glutathione S-transferase, complete cds
4452	17188	29813	1.1	2.9E-01	AA284468.1	EST_HUMAN	wr02f10.x1 NCI_CGAP_G08 Homo sapiens cDNA clone IMAGE:2480395 3'
5177	17966		1.06	2.9E-01	R37495.1	EST_HUMAN	zs57d12.r1 NCI_CGAP_G081 Homo sapiens cDNA clone IMAGE:701591 5' similar to cortaine Alu
5310	19507	32532	0.79	2.9E-01	AF321001.1	NT	repetitive element
5677	18471	31387	5.19	2.9E-01	X59098.1	NT	y77e12.s1 Soares infant brain INIB Homo sapiens cDNA clone IMAGE:28291 3'
5677	18471	31388	5.19	2.9E-01	X59098.1	NT	Suaeda maritima subsp. salsa S-adenosylmethionine synthetase 2 mRNA, complete cds
5689	18482	31401	6.4	2.9E-01	6679662	NT	B. subtilis levanase operon levD, levE, levF, levG and secC (partial) genes for fructose phosphotransferase
5965	18747	31708	1.47	2.9E-01	AA416146.1	EST_HUMAN	B. subtilis levanase operon levD, levE, levF, levG and secC (partial) genes for fructose phosphotransferase
6187	18084	31837	1.08	2.9E-01	A1797128.1	EST_HUMAN	system polypeptides P16,18,28,30 and levanase
6233	19007	31984	2.4	2.9E-01	U03420.1	NT	Mus musculus Eph receptor A8 (Epha8), mRNA
6365	19135	32130	0.58	2.9E-01	R69194.1	EST_HUMAN	zs97b12.r1 Soares NIHMPu_S1 Homo sapiens cDNA clone IMAGE:767711 5'
6365	19135	32131	0.58	2.9E-01	R69194.1	EST_HUMAN	wc27c05.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:2342312 3' similar to contains L1.11 L1
6621	19383		0.58	2.9E-01	Z50156.1	NT	repetitive element;
6890	17966	30523	1.52	2.9E-01	AF142328.1	NT	Bos taurus myosin I mRNA, complete cds
6968	19688	32737	2.95	2.9E-01	Q04399	SWISSPROT	y33d08.r1 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:141615 5'
							y33d08.r1 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:141615 5'
							D. discoideum gene for 34 kD actin binding protein
							Mus musculus Filin protein (Filin) gene, complete cds; and Lgln protein (Lgln) gene, partial cds
							PUTATIVE MULTICOPPER OXIDASE YDR508C
							Mus musculus major histocompatibility locus class II region; Fas-binding protein Daxx (DAXX) gene, partial cds; Bmg1 (BING1), tapasin (tapasin), RalGDS-like factor (RLF), KE2 (KE2), BING4 (BING4), bclx1, 3-galactosyl transferase (beta1,3-galactosyl tr>
7059	19750	32813	2.06	2.9E-01	AF100956.1	NT	601066830F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3462287 5'
7820	20515	33640	1.67	2.9E-01	BE540422.1	EST_HUMAN	601066830F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3462287 5'
7820	20515	33641	1.67	2.9E-01	BE540422.1	EST_HUMAN	601066830F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3462287 5'
8049	20743	33875	0.48	2.9E-01	AJ237937.1	NT	Bos taurus partial stat5A gene, exons 5-19
8049	20743	33876	0.48	2.9E-01	AJ237937.1	NT	Bos taurus partial stat5A gene, exons 5-19
8062	20756		0.94	2.9E-01	BF217743.1	EST_HUMAN	601882570F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4085113 5'
							Buchnera aphidicola pleasmid pLeu isolate M1 2-isopropylmalate synthase (leuA) gene, partial cds; 3-isopropylmalate dehydrogenase (leuB) gene, complete cds; and isopropylmalate dehydratase subunit (leuC) gene, partial cds
8237	20831		0.49	2.9E-01	AF197486.1	NT	

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8493	21186	34328	0.84	2.9E-01	AU160910.1	EST_HUMAN	AU150910 NT2RP2 Homo sapiens cDNA clone NT2RP2003901 3'
8823	21516	34080	1.02	2.9E-01	AF225808.1	NT	Arabidopsis thaliana sulfonyleurea receptor-like protein mRNA, complete cds
8831	21622	34765	0.65	2.9E-01	M22452.1	NT	Baboon lymphocyte homing/adhesion receptor mRNA, complete cds
9145	21876	35040	0.78	2.9E-01	AJ248287.1	NT	Pyrococcus abyssi complete genome; segment 5/6
9145	21876	35041	0.76	2.9E-01	AJ248287.1	NT	Pyrococcus abyssi complete genome; segment 5/6
10810	23493	36728	1.93	2.9E-01	AF128843.1	NT	Typanosoma cruzi stage-specific surface glycoprotein gp82 (gp82) mRNA, partial cds
11114	23784	37069	1.75	2.9E-01	V01394.1	NT	Torpedo californica mRNA encoding acetylcholine receptor gamma subunit
11114	23784	37060	1.75	2.9E-01	V01394.1	NT	Torpedo californica mRNA encoding acetylcholine receptor gamma subunit
11575	24174	37489	1.59	2.9E-01	AA935373.1	EST_HUMAN	repetitive element
11579	24178	37493	3.55	2.9E-01	AL139078.2	NT	Campylobacter jejuni NGTC11168 complete genome; segment 5/6
11600	24198	37519	1.82	2.9E-01	U35025.1	NT	Rattus norvegicus activin receptor-like kinase 7 (ALK7) mRNA, complete cds
11600	24199	37520	1.82	2.9E-01	U35025.1	NT	Rattus norvegicus activin receptor-like kinase 7 (ALK7) mRNA, complete cds
12452	24821	31024	4.05	2.9E-01	AF082453.1	NT	Homo sapiens TNF- $\alpha$ inducible RNA binding protein (TIRP) gene, complete cds
12741	25007	30973	1.86	2.9E-01	Y08637.1	NT	Chlamydomonas reinhardtii mRNA for nitrite reductase structural locus
12741	25007	30974	1.86	2.9E-01	Y08637.1	NT	Chlamydomonas reinhardtii mRNA for nitrite reductase structural locus
555	13538		1.7	2.9E-01	U67138.1	NT	Rattus norvegicus A-kinase anchoring protein AKAP-150 mRNA, complete cds
590	13342		1.01	2.9E-01	L28145.1	NT	Prune dwarf virus movement protein, complete cds; coat protein, complete cds
1061	13819	26481	3.89	2.9E-01	AF168050.1	NT	Gulka guinea oocyte maturation factor Mos (c-mos) gene, partial cds
1254	14003	26671	1.82	2.9E-01	BE313442.1	EST_HUMAN	601148733F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE3163888 5'
1254	14003	26672	1.82	2.9E-01	BE313442.1	EST_HUMAN	601148733F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE3163888 5'
1268	14017	26684	1.34	2.9E-01	D66650.1	NT	Human mRNA for serine/threonine protein kinase, complete cds
1651	14397	27087	1.11	2.9E-01	AF075238.1	NT	Hepatitis G virus isolate 80 (SZNAE12) polyprotein precursor, gene, partial cds
1720	14463	27163	2.04	2.9E-01	AW880020.1	EST_HUMAN	QV1-CT0384-120200-085-b05 CT0384 Homo sapiens cDNA
2006	14742	27467	2.35	2.9E-01	AL047820.1	EST_HUMAN	DKFZp586i2321_j1 586 (synonym: hube1) Homo sapiens cDNA clone DKFZp586i2321
2127	14868	27588	1.41	2.9E-01	AW811195.1	EST_HUMAN	h444803.x1 Source_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2912333 3'
2475	15193	27893	2.04	2.9E-01	AE000494.1	NT	Escherichia coli K-12 MG1655 section 384 of 400 of the complete genome
2475	15193	27894	2.04	2.9E-01	AE000494.1	NT	Escherichia coli K-12 MG1655 section 384 of 400 of the complete genome
2649	15284		1.89	2.9E-01	AL161666.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 65
2670	15390	28118	0.97	2.9E-01	AB020975.1	NT	Arabidopsis thaliana mRNA for lipoyltransferase, complete cds
2970	15736		1.28	2.9E-01	AF179480.1	NT	Taroplasma gondii 90kDa heat-shock protein (HSP90) mRNA, partial cds
2971	15737	28386	2.04	2.9E-01	Z14037.1	NT	B.taurus microsatellite (ETH121)
2971	15737	28387	2.04	2.9E-01	Z14037.1	NT	B.taurus microsatellite (ETH121)
3373	16132	28786	1.13	2.9E-01	AP000004.1	NT	Pyrococcus horikoshii OT3 genomic DNA, 777001-694000 nt. position (4/7)

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3978	16726	28360	1.60	2.8E-01	AE001180.1	NT	Borrelia burgdorferi (section 66 of 70) of the complete genome
4174	16914		1.95	2.8E-01	AI090868.1	EST_HUMAN	ov44g10.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1640226 3' similar to contains Alu repetitive element; contains element MER22 repetitive element;
4422	17158	28789	0.89	2.8E-01	AL021127.2	NT	Mus musculus chromosome X contig; putative Magea9 gene, Caltractin, NAD(P) <sup>+</sup> steroid dehydrogenase and Zinc finger protein 185
4427	17163	29793	2.31	2.8E-01	P13615	SWISSPROT	RNA POLYMERASE BETA SUBUNIT (LARGE STRUCTURAL PROTEIN) (L PROTEIN)
4772	17504	30126	1.10	2.8E-01	AF075238.1	NT	Hepatitis G virus isolate 80 (SZNAE12) polyprotein precursor, gene, partial cds
4777	17508	30131	2.07	2.8E-01	AF030154.1	NT	Bovine adenovirus 3 complete genome
4808	17539	30162	1.23	2.8E-01	BF528188.1	EST_HUMAN	602042601F1 NCL CGAP_Bim67 Homo sapiens cDNA clone IMAGE:4180128 5'
4829	17560	30182	1.91	2.8E-01	AI272699.1	EST_HUMAN	q150c11.x1 Soares_NHMPu_S1 Homo sapiens cDNA clone IMAGE:1876628 3' similar to contains Alu repetitive element; contains element LTR5 repetitive element;
5228	25084	30680	24.66	2.8E-01	AA346997.1	EST_HUMAN	EST157072 Infant brain Homo sapiens cDNA 5' end
5519	18317	31218	3.07	2.8E-01	AB016825.1	NT	Homo sapiens OCTN2 gene, complete cds
6727	18519		0.85	2.8E-01	AW992583.1	EST_HUMAN	CM1-BN0024-150200-118-g12 BN0024 Homo sapiens cDNA
5848	18635		0.83	2.8E-01	AA404576.1	EST_HUMAN	zh4101.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone IMAGE:724921 5' similar to contains Alu repetitive element
6083	25418		0.85	2.8E-01	M36668.1	NT	Bovine 680 bp repeated unit of 1.723 satellite DNA
6123	18901	31869	1.83	2.8E-01	AF003124.1	NT	Mesembryanthemum crystallinum fructose-bisphosphate aldolase mRNA, complete cds
6123	18901	31870	1.83	2.8E-01	AF003124.1	NT	Mesembryanthemum crystallinum fructose-bisphosphate aldolase mRNA, complete cds
6832	19394	32409	8.34	2.8E-01	BF511215.1	EST_HUMAN	UI-H-B14-act-f-04-0-UI.s1 NCL CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3086182 3'
7341	20022		1.17	2.8E-01	U05633.1	NT	Marsilea quadrifolia ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcl.) gene, chloroplast gene encoding chloroplast protein, partial cds
7382	20062	33140	0.68	2.8E-01	X69980.1	NT	L. esculentum ypt2 mRNA for GTP-binding protein
7991	20696	33811	1.28	2.8E-01	AI346126.1	EST_HUMAN	qp48h01.x1 NCL CGAP_Co8 Homo sapiens cDNA clone IMAGE:1926289 3' similar to gb:U06323_cds1 MITOCHONDRIAL 60S RIBOSOMAL PROTEIN L3 (HUMAN);
7991	20696	33812	1.28	2.8E-01	AI346126.1	EST_HUMAN	qp48h01.x1 NCL CGAP_Co8 Homo sapiens cDNA clone IMAGE:1926289 3' similar to gb:U06323_cds1 MITOCHONDRIAL 60S RIBOSOMAL PROTEIN L3 (HUMAN);
8108	20802	33935	1.92	2.8E-01	U51688.1	NT	Homo sapiens leucostard 14-alpha demethylase cytochrome P-450 (CYP51) gene, exon 5'
8412	21105	34244	0.81	2.8E-01	AA911628.1	EST_HUMAN	GAMMA-1 CHAIN C REGION (HUMAN);
8498	21180		7.34	2.8E-01	BF347847.1	EST_HUMAN	602022987F1 NCL CGAP_Bim67 Homo sapiens cDNA clone IMAGE:4158525 5'
9366	21941	35115	0.92	2.8E-01	U17251.1	NT	Neurospora crassa negative regulator sulfur controller-2 (scon-2) gene, complete cds
9611	22284		0.88	2.8E-01	L13664.1	NT	Lycopodium obscurum peroxidase (TPX1) mRNA, complete cds
9788	22439	35848	0.86	2.8E-01	AF132726.1	NT	Escherichia coli translocated intimin receptor Tir (tir) gene, complete cds

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9788	22439	35647	0.66	2.8E-01	AF132728.1	NT	Escherichia coli translocated intimin receptor Tir (tir) gene, complete cds
9850	22500	35700	0.52	2.8E-01	AF294393.1	NT	Rattus norvegicus glycerol-3-phosphate dehydrogenase gene, promoters A and B and exons 1a and 1b;
9960	22608	35813	3.35	2.8E-01	7708163	NT	nuclear gene for mitochondrial product
10211	22859		1.47	2.8E-01	9828154	NT	Homo sapiens hypothetical protein (LOC51319), mRNA
10251	22899	36109	0.8	2.8E-01	BE960727.2	EST_HUMAN	Fujinami sarcoma virus, complete genome
10644	23335	36573	2.42	2.8E-01	BF241062.1	EST_HUMAN	601654822R1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:3839766 3'
10644	23335	36574	2.42	2.8E-01	BF241062.1	EST_HUMAN	601880794F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:4106950 5'
10671	23362	36603	3.83	2.8E-01	BF695970.1	EST_HUMAN	601880794F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:4106950 5'
							601852148F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4076028 5'
10794	23477	36719	1.33	2.8E-01	AF051062.1	NT	Drosophila heteronema fruitless (fru) gene, alternative splice products, 5' flanking region, exons 1 through 7 and complete cds
11247	23909		4.51	2.8E-01	BF674023.1	EST_HUMAN	602137418F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4273853 5'
11563	24192	37510	17.86	2.8E-01	AL139074.2	NT	Campylobacter jejuni NCTC111188 complete genome; segment 176
12406	24789		15.41	2.8E-01	D83329.1	NT	Mus musculus DNA for prostaglandin D2 synthase, complete cds
12509	24861	31013	4.22	2.8E-01	BE178900.1	EST_HUMAN	PM4-HT0808-030400-001-407 HT0808 Homo sapiens cDNA
12632	24877	31019	1.77	2.8E-01	BE900116.1	EST_HUMAN	601873020F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3956598 5'
12695	25306		2.62	2.8E-01	11433629	NT	Homo sapiens CDC42-binding protein kinase beta (DMPK-like) (CDC42BPB), mRNA
12806	25401		1.49	2.8E-01	AW025400.1	EST_HUMAN	Homo sapiens CDC42-binding protein kinase beta (DMPK-like) (CDC42BPB), mRNA
494	13249	26890	3.97	2.7E-01	Y17324.1	NT	Rattus norvegicus CDK104 mRNA
589	13377	28007	3.25	2.7E-01	AA450061.1	EST_HUMAN	z33610.s1 Soares_tetis_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:788827 3' similar to contains Alu repetitive element
1238	13987	28654	2.13	2.7E-01	AB004606.1	NT	ipomoea purpurea transposable element Ttp100 gene for transposase, complete cds
1617	14364		1.59	2.7E-01	X79815.1	NT	G. lambia SR2 gene
1722	14465	27184	3.5	2.7E-01	W58067.1	EST_HUMAN	z122h10.11 Soares_fetal_heart_Nb2HF19W Homo sapiens cDNA clone IMAGE:341443 5'
1799	14511	27212	2.56	2.7E-01	P03341	SWISSPROT	GAG POLYPROTEIN [CONTAINS: INNER COAT PROTEIN P12; CORE PROTEIN P16; CORE SHELL PROTEIN P30; NUCLEOPROTEIN P10]
2131	15598		2.25	2.7E-01	AF045751.1	NT	Rattus norvegicus vesicular monoamine transporter type 2, promoter region and exon 1
2307	15089	27828	10.01	2.7E-01	Y13868.1	NT	Feline immunodeficiency virus env gene, isolate ITT0088p1U (M88), partial
2457	15175	27914	4.07	2.7E-01	AI310658.1	EST_HUMAN	la43c11.x2 NCI_CGAP_Lu25 Homo sapiens cDNA clone IMAGE:2046836 3' similar to contains element L1 repetitive element
2899	15666	28314	1.2	2.7E-01	AF251276.1	NT	Mus musculus serine protease inhibitor 14 (Spi14) mRNA, complete cds
2983	15749		2.63	2.7E-01	BF088284.1	EST_HUMAN	CM1-HT0875-060000-395-405 HT0875 Homo sapiens cDNA
3283	18044	28693	0.68	2.7E-01	8383620	NT	Rattus norvegicus insulin receptor (InsR), mRNA
3992	18740	28374	1.97	2.7E-01	AI928015.1	EST_HUMAN	wc82a11.x1 NCI_CGAP_Kd111 Homo sapiens cDNA clone IMAGE:2462828 3'

Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4002	16749	29380	0.69	2.7E-01	AF216214.1	NT	Drosophila buzzatii alpha-esterase 6 (aE6) gene, partial cds
4002	16749	29381	0.69	2.7E-01	AF216214.1	NT	Drosophila buzzatii alpha-esterase 6 (aE6) gene, partial cds
4008	16754	29384	2.12	2.7E-01	L77690.1	NT	Homo sapiens DXGeorge syndrome critical region, telomeric end
4980	17703		2.85	2.7E-01	AW889131.1	EST_HUMAN	RC1-CT0288-230200-018-e03 CT0288 Homo sapiens cDNA
5011	17733	30339	2.53	2.7E-01	AA100658.1	EST_HUMAN	z80a01.11 Striatogene colon (#837204) Homo sapiens cDNA IMAGE:511848 5' similar to gb:X85488_cds1 HETEROGENOUS NUCLEAR RIBONUCLEOPROTEIN U (HUMAN);
5011	17733	30340	2.53	2.7E-01	AA100658.1	EST_HUMAN	z80a01.11 Striatogene colon (#837204) Homo sapiens cDNA IMAGE:511848 5' similar to
5185	17983	30509	2.39	2.7E-01	P17277	SWISSPROT	gb:X85488_cds1 HETEROGENOUS NUCLEAR RIBONUCLEOPROTEIN U (HUMAN);
5402	18202		0.85	2.7E-01	AB033171.1	NT	HOMEOBOX PROTEIN HOXA-4 (HOXA-4)
							Astrepura myrophthalma mitochondrial cyb gene for cytochrome b, partial cds
6249	19023	31995	0.68	2.7E-01	Q00918	SWISSPROT	LATENT TRANSFORMING GROWTH FACTOR BETA BINDING PROTEIN 1 PRECURSOR (TRANSFORMING GROWTH FACTOR BETA-1 BINDING PROTEIN 1) (TGF-BETA1-BP-1) (TRANSFORMING GROWTH FACTOR BETA-1 MASKING PROTEIN, LARGE SUBUNIT)
6249	19023	31998	0.68	2.7E-01	Q00918	SWISSPROT	LATENT TRANSFORMING GROWTH FACTOR BETA BINDING PROTEIN 1 PRECURSOR (TRANSFORMING GROWTH FACTOR BETA-1 BINDING PROTEIN 1) (TGF-BETA1-BP-1) (TRANSFORMING GROWTH FACTOR BETA-1 MASKING PROTEIN, LARGE SUBUNIT)
6515	19280	32282	0.93	2.7E-01	AE001094.1	NT	Archaeoglobus fulgidus section 13 of 172 of the complete genome
6515	19280	32283	0.93	2.7E-01	AE001094.1	NT	Archaeoglobus fulgidus section 13 of 172 of the complete genome
6681	19598	32637	2.23	2.7E-01	Q01554	SWISSPROT	FIBRILLIN 1 PRECURSOR
6816	19653	32689	0.58	2.7E-01	U15807.1	NT	Drosophila melanogaster rbc-40 protein, Rop protein (Rop), and small GTP binding protein (DRas2) genes, complete cds
6852	19434		0.79	2.7E-01	AI540070.1	EST_HUMAN	h08h08.v1 NCL_OGAP_GLI1 Homo sapiens cDNA clone IMAGE:2075103 3'
7258	19940	33015	0.74	2.7E-01	Q11079	SWISSPROT	HYPOTHETICAL 20.9 KD PROTEIN B0563.3 IN CHROMOSOME X
7461	20134	33225	0.75	2.7E-01	Q01168	SWISSPROT	NITROGEN REGULATORY PROTEIN NUT1
7461	20134	33226	0.75	2.7E-01	Q01168	SWISSPROT	NITROGEN REGULATORY PROTEIN NUT1
7588	20256	33363	2.16	2.7E-01	AF248054.1	NT	Bos taurus micromolar calcium activated neutral protease 1 (CAPN1) gene, exons 11-20, and partial cds
7588	20256	33364	2.16	2.7E-01	AF248054.1	NT	Bos taurus micromolar calcium activated neutral protease 1 (CAPN1) gene, exons 11-20, and partial cds
7638	20303	33411	0.94	2.7E-01	AA351121.1	EST_HUMAN	EST158740 Infant brain Homo sapiens cDNA 5' end similar to myosin-binding protein H
7638	20303	33412	0.94	2.7E-01	AA351121.1	EST_HUMAN	EST158740 Infant brain Homo sapiens cDNA 5' end similar to myosin-binding protein H
7694	20358	33472	0.71	2.7E-01	U01081.1	NT	Oryctolagus cuniculus UDP-glucuronosyltransferase (UGT2B13) mRNA, complete cds
7763	20459	33583	0.68	2.7E-01	AA013147.1	EST_HUMAN	z83501.1.a1 Scores, retina N2b4-HR Homo sapiens cDNA clone IMAGE:360957 3' similar to contains Alu repetitive element

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Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7925	20820		0.53	2.7E-01	AF048620.1	NT	Carassius auratus pituitary adenylate cyclase activating polypeptide type 1 receptor precursor mRNA, complete cds
8086	20780	33909	0.51	2.7E-01	R39257.1	EST_HUMAN	yc91106.s1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:23511 3'
8190	20884	34022	0.8	2.7E-01	AL161552.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 62
8957	21349	34494	0.69	2.7E-01	Q14764	SWISSPROT	MAJOR VAULT PROTEIN (MVP) (LUNG RESISTANCE-RELATED PROTEIN)
8925	21616	34760	0.48	2.7E-01	X03216.1	NT	Staphylococcus aureus transposon Tn554
9232	21911	35084	10.41	2.7E-01	O83809	SWISSPROT	THREONYL-TRNA SYNTHETASE (THREONINE-TRNA LIGASE) (THRRS)
9232	21911	35085	10.41	2.7E-01	O83809	SWISSPROT	THREONYL-TRNA SYNTHETASE (THREONINE-TRNA LIGASE) (THRRS)
9235	21914		2	2.7E-01	P37928	SWISSPROT	FIMBRIAE W PROTEIN
9700	22351	35546	0.61	2.7E-01	D88090.1	NT	Rattus norvegicus DNA for peroxisome assembly factor-2, exon 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17 and complete cds
9981	22629	35638	0.74	2.7E-01	AF091848.1	NT	Oryctolagus cuniculus calgranulin C mRNA, partial cds
10018	22866	35882	3.09	2.7E-01	AF087434.1	NT	Mus musculus transcription factor NF-ATc isoform a (NF-ATc) mRNA, complete cds
10149	22797	36012	0.57	2.7E-01	AF156539.1	NT	Homo sapiens xeroderma pigmentosum complementation group C (XPC) gene, intron 9
10149	22797	36013	0.57	2.7E-01	AF156539.1	NT	Homo sapiens xeroderma pigmentosum complementation group C (XPC) gene, intron 9
10714	23403	36642	1.62	2.7E-01	AV705043.1	EST_HUMAN	AV705043 ADB Homo sapiens cDNA clone ADB00005 5'
10714	23403	36643	1.62	2.7E-01	AV705043.1	EST_HUMAN	AV705043 ADB Homo sapiens cDNA clone ADB00005 5'
10724	23412	36653	3.13	2.7E-01	AJ133268.1	NT	Homo sapiens caveolin-1/2 locus, Contig1, D7S522, genes CAV2 (exons 1, 2a, and 2b), CAV1 (exons 1 and 2)
11820	24408		1.6	2.7E-01	Q14181	SWISSPROT	PUTATIVE 60S RIBOSOMAL PROTEIN C4F8.06C
12482	25180		1.49	2.7E-01	AB008782.1	NT	Arabidopsis thaliana mRNA for sulfate transporter, complete cds
12665	24963		2.83	2.7E-01	AF217491.1	NT	Homo sapiens fragile 16D oxidoreductase (FOR) gene, exon 6
12811	25064	30829	1.95	2.7E-01	AV742419.1	EST_HUMAN	AV742419 CB Homo sapiens cDNA clone CBMAXF02 5'
457	15542	25883	2.03	2.6E-01	P78411	SWISSPROT	IRQUOIS-CLASS HOMEODOMAIN PROTEIN IFX-2
468	13254		1.38	2.6E-01	D18459.1	NT	Bos taurus mRNA for mb-1, complete cds
1372	14120	26765	1.66	2.6E-01	BE885087.1	EST_HUMAN	601510838F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3912345 5'
1417	14165	26848	1.14	2.6E-01	AB013290.1	NT	Glycine max pseudogene for Bd 30K
1889	14628	27335	4.33	2.6E-01	AL161472.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 2
1889	14628	27336	4.33	2.6E-01	AL161472.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 2
							bb04d10.x1 NIH_MGC_14 Homo sapiens cDNA clone IMAGE:2858451 3' similar to gb:M36072 80S RIBOSOMAL PROTEIN L7A (HUMAN); gb:M14689_cds1 Mouse surfeit locus surfeit 3 protein gene (MOUSE);
2086	14818		10.48	2.6E-01	AW733152.1	EST_HUMAN	Human prealbumin gene, complete cds
2148	14878	27613	3.7	2.6E-01	M11844.1	NT	B.mariannus rbcL gene
2476	15194		1.62	2.6E-01	Y12966.1	NT	

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E- Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2548	16263		8.87	2.0E-01	BE272440.1	EST_HUMAN	601126016F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:2990043 5'
3588	16323	29971	8.99	2.0E-01	M22342.1	NT	Bacteriophage T2 DNA-(adenine-N6)methyltransferase (dam) gene, complete cds
3634	16387	29028	2.02	2.0E-01	AF229118.1	NT	Homo sapiens acetylcholinesterase collagen-like tail subunit (COLQ) gene, exons 1A, 2, 3, 4, and 5
4079	16923	29449	0.96	2.0E-01	AW969510.1	EST_HUMAN	EST371590 MAGE resequences, MAGF Homo sapiens cDNA
4134	16878	29506	16.7	2.0E-01	BE080598.1	EST_HUMAN	QV1-BT0630-040400-132-e03 BT0630 Homo sapiens cDNA
4324	17063	29691	1.2	2.0E-01	AF175293.1	NT	Enterococcus faecium strain N97-330 vanD glycopeptide resistance gene cluster, complete cds; and unknown gene
4459	17195	29821	0.8	2.0E-01	AB021180.1	NT	Gallus gallus mRNA for skeletal myosin heavy chain, complete cds
4469	17195	29822	0.8	2.0E-01	AB021180.1	NT	Gallus gallus mRNA for skeletal myosin heavy chain, complete cds
4511	17246	29881	1.46	2.0E-01	AA457617.1	EST_HUMAN	aa89d07.r1 Stratiogene fetal retina 937202 Homo sapiens cDNA clone IMAGE:838477 5'
4601	17336	29865	1.77	2.0E-01	U01103.1	NT	Arabidopsis thaliana PSI type III chlorophyll a/b-binding protein (Lhca3*) mRNA, complete cds
4667	17401	30035	1.18	2.0E-01	AF142703.1	NT	Optineidia radicea matricase-like protein (matK) gene, complete cds; chloroplast gene for chloroplast product
4910	17638	30252	0.85	2.0E-01	AF153350.1	NT	Mus musculus metalloproteinase disintegrin (Adam28) mRNA, complete cds
4914	17642	30257	3.8	2.0E-01	H04958.1	EST_HUMAN	Y51e05.r1 Soares placenta NB2HP Homo sapiens cDNA clone IMAGE:152288 5'
5257	18063		1.09	2.0E-01	AB035972.1	NT	Paramecium caudatum gene for PAP, complete cds
5484	18283		0.88	2.0E-01	A1862398.1	EST_HUMAN	td16a03.x1 NCL_CGAP_Cot16 Homo sapiens cDNA clone IMAGE:2075788 3' similar to contains element MEFR35 repetitive element;
5688	18481	31400	0.73	2.0E-01	AF207550.1	NT	Homo sapiens protein translocase, JM28 protein, UDP-galactose translocator, pim-2 protooncogene homolog pim-2h, and shal-type potassium channel genes, complete cds; JM12 protein and transcription factor (GHM enhancer 3 genes, partial cds; and unknown g*
5980	25417		2.35	2.0E-01	AE001811.1	NT	Thermotoga maritima section 123 of 136 of the complete genome
6108	18885	31854	2.26	2.0E-01	A1582557.1	EST_HUMAN	ts02a12.x1 NCL_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2227438 3' similar to SW:NDFF1_RAT Q84289 NEUROGENIC DIFFERENTIATION FACTOR 1; contains element LTR1 repetitive element;
6108	18885	31855	2.26	2.0E-01	A1582557.1	EST_HUMAN	ts02a12.x1 NCL_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2227438 3' similar to SW:NDFF1_RAT Q84289 NEUROGENIC DIFFERENTIATION FACTOR 1; contains element LTR1 repetitive element;
6328	19098	32086	0.91	2.0E-01	AL102757.2	NT	Neisseria meningitidis serogroup A strain Z2491 complete genome; segment 8/7
6570	19334	32344	0.73	2.0E-01	BE792052.1	EST_HUMAN	601581754F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3836158 5'
6570	19334	32345	0.73	2.0E-01	BE792052.1	EST_HUMAN	601581754F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3836158 5'
6638	19673	32719	0.9	2.0E-01	A1814380.1	EST_HUMAN	wd48c04.x1 Soares NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2331368 3' similar to gb:M37721 PEPTIDYL-GLYCINE ALPHA-AMIDATING MONOOXYGENASE PRECURSOR (HUMAN);

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7289	19972	33060	0.62	2.6E-01	BE148961.1	EST_HUMAN	CMA-HT0245-031199-085-04 HT0245 Homo sapiens cDNA
7329	25110		0.79	2.6E-01	AL139077.2	NT	Campylobacter jejuni NCTC11168 complete genome; segment 4/6
7363	20044		0.69	2.6E-01	AA198149.1	EST_HUMAN	zp92e01.r1 Stragene HeLa cell s3 937218 Homo sapiens cDNA clone IMAGE:627672 5'
7639	20304	33413	1.9	2.6E-01	R10395.1	EST_HUMAN	y037a03.s1 Soares fetal liver spleen INFLS Homo sapiens cDNA clone IMAGE:129004 3' similar to gb:X12517 U1 SMALL NUCLEAR RIBONUCLEOPROTEIN C (HUMAN);
7687	20351	33485	0.66	2.6E-01	Q09855	SWISSPROT	HYPOTHETICAL TRP-ASP REPEATS CONTAINING PROTEIN C29E6.01 IN CHROMOSOME I
7748	20444	33568	1.3	2.6E-01	R02411.1	EST_HUMAN	y082a07.r1 Soares fetal liver spleen INFLS Homo sapiens cDNA clone IMAGE:124212 5'
7804	20499	33620	1.15	2.6E-01	BE144331.1	EST_HUMAN	MRO-HT0166-181199-003-d12 HT0166 Homo sapiens cDNA
8040	20735	33867	0.64	2.6E-01	X82841.1	NT	D.melanogaster mRNA for alpha 1,2 mannosidase (Berlin)
8040	20735	33868	0.64	2.6E-01	X82841.1	NT	D.melanogaster mRNA for alpha 1,2 mannosidase (Berlin)
8232	20926	34094	3.05	2.6E-01	BF343588.1	EST_HUMAN	602014422F1 NCI_CGAP_Brm64 Homo sapiens cDNA clone IMAGE:4150398 5'
8309	21003	34140	2.13	2.6E-01	Q10169	SWISSPROT	HYPOTHETICAL 75.2 KD PROTEIN C11C11.02 IN CHROMOSOME II
8594	21286	34424	4.32	2.6E-01	BE830339.1	EST_HUMAN	RC5-ET0082-310500-021-F10 ET0082 Homo sapiens cDNA
8594	21286	34425	4.32	2.6E-01	BE830339.1	EST_HUMAN	RC5-ET0082-310500-021-F10 ET0082 Homo sapiens cDNA
9367	21942	35116	0.96	2.6E-01	X17604.1	NT	S. occidentalis INV gene for Invertase (EC 3.2.1.26)
9639	22291		0.62	2.6E-01	AF057121.1	NT	Loritra canadensis cytochrome b (cyt) gene, mitochondrial gene encoding mitochondrial protein, complete cds
9768	22419	35628	1.19	2.6E-01	P87366	SWISSPROT	GREEN-SENSITIVE OPSIN (GREEN CONE PHOTORECEPTOR PIGMENT) (KFLH-G)
9768	22419	35627	1.19	2.6E-01	P87366	SWISSPROT	GREEN-SENSITIVE OPSIN (GREEN CONE PHOTORECEPTOR PIGMENT) (KFLH-G)
9930	22578		0.48	2.6E-01	U87581.1	NT	Methanococcus jannaschii section 123 of 160 of the complete genome
10090	22738		0.74	2.6E-01	Q28285	SWISSPROT	VON WILLEBRAND FACTOR PRECURSOR (VWF)
10406	23052		0.9	2.6E-01	Y10106.1	NT	Homo sapiens PHEX gene
10467	23113		0.45	2.6E-01	AB015355.1	NT	Homo sapiens NRAMP2 gene for natural resistance-associated macrophage protein 2, complete cds
11400	24006	37310	1.78	2.6E-01	P48280	SWISSPROT	CELL DIVISION PROTEIN FTSW HOMOLOG
11511	24111		66.41	2.6E-01	X81755.1	NT	Human lambda-immunoglobulin constant region complex (germline)
11966	24534		1.71	2.6E-01	10190655	NT	Mus musculus Jerky (Jrk), mRNA
12177	25309		3.1	2.6E-01	BE883491.1	EST_HUMAN	601811052F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3912612 5'
12242	24693	31077	2.81	2.6E-01	AF316898.1	NT	Homo sapiens NaK-ATPase gamma subunit (FXVD2) gene, complete cds, alternatively spliced
12565	24895		1.56	2.6E-01	D89425.1	NT	Caixa cobaya mRNA for serine/threonine kinase, complete cds
12725	24996		2.19	2.6E-01	P47285	SWISSPROT	HYPOTHETICAL PROTEIN MG039.
234	13045	25684	2.55	2.6E-01	4502296	NT	Homo sapiens ATP synthase, H+ transporting, mitochondrial F1 complex, delta subunit (ATP5D), nuclear gene encoding mitochondrial protein, mRNA



Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
235	13045	25984	2.39	2.5E-01	4802296	NT	Homo sapiens ATP synthase, H <sup>+</sup> transporting, mitochondrial F1 complex, delta subunit (ATP5D), nuclear gene encoding mitochondrial protein, mRNA
248	13057		3.32	2.5E-01	M26501.1	NT	Starfish ( <i>P. ochraceus</i> ) cytoplasmic actin gene, complete cds
813	13584	20250	1.35	2.5E-01	U09084.1	NT	Mus musculus ICR/Swiss glyoxaldehyde 3-phosphate dehydrogenase (Gapd-S) gene, complete cds
1038	13798		1.2	2.5E-01	AE002156.1	NT	Ureaplasma urealyticum section 57 of 59 of the complete genome
1089	13857	26517	6.42	2.5E-01	T86837.1	EST_HUMAN	ye11g07.r1 Stratagene lung (#637210) Homo sapiens cDNA clone IMAGE:117468 5'
1509	14255	26941	0.9	2.5E-01	AL115824.1	NT	Bacillus cereus strain T4 cDNA library under conditions of nitrogen deprivation
1721	14484		4.79	2.5E-01	4885405	NT	Homo sapiens hyperpolarization activated cyclic nucleotide-gated potassium channel 4 (HCN4) mRNA
1878	15581	27323	1.58	2.5E-01	BE696804.1	EST_HUMAN	PM4-CT0400-310700-005-008 CT0400 Homo sapiens cDNA
1876	15581	27324	1.58	2.5E-01	BE696804.1	EST_HUMAN	PM4-CT0400-310700-005-008 CT0400 Homo sapiens cDNA
2407	15128		16	2.5E-01	AE000675.1	NT	Aquifex aeolicus section 7 of 109 of the complete genome
2500	15217		1.09	2.5E-01	AA251987.1	EST_HUMAN	zsf11a12.r1 NCI CGAP_GCB1 Homo sapiens cDNA clone IMAGE:684862 5'
3370	16129		0.84	2.5E-01	BF698193.1	EST_HUMAN	602125525F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4282279 5'
3407	16165		3.04	2.5E-01	AW973471.1	EST_HUMAN	EST386494 IMAGE resequencer, MAGM Homo sapiens cDNA
3524	16280	28835	1.25	2.5E-01	AF233875.1	NT	Danio rerio peptide YY precursor gene, complete cds
3537	16293	28842	7.54	2.5E-01	AL161517.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 29
3828	16579	29211	1.53	2.5E-01	A1741483.1	EST_HUMAN	wg11c07.x1 Soares_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:2384780 3'
3828	16579	29212	1.53	2.5E-01	A1741483.1	EST_HUMAN	wg11c07.x1 Soares_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:2384780 3'
4283	17022		0.97	2.5E-01	Q03314	SWISSPROT	RHIB PROTEIN
4700	17434		1.25	2.5E-01	Q27225	SWISSPROT	MOL T-INHIBITING HORMONE PRECURSOR (Mih)
4706	17438	30070	3.99	2.5E-01	AF007788.1	NT	Charistoneura fumiferana chaperone associated protein 2 (DAP2) mRNA, complete cds
4732	17464	30101	2.01	2.5E-01	AE004410.1	NT	Vibrio cholerae chromosome II, section 73 of 83 of the complete chromosome
4751	17483		3.7	2.5E-01	AJ250113.1	NT	Mus musculus annexin V gene, intron 4 segment containing 5' LTR and gag portion of MuERV-L (murine endogenous retrovirus) element
4781	17513	30135	1.09	2.5E-01	BE896785.1	EST_HUMAN	601437486F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3922800 5'
4987	17710	30315	0.71	2.5E-01	AW878588.1	EST_HUMAN	h082f11.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:3041867 3' similar to WP:Y71P0A_294.D CE22688;
5243	18049	30678	13.48	2.5E-01	S83390.1	NT	T3 receptor-associated cofactor-1 [human, fetal liver, mRNA, 2930 nt]
5870	18067	31598	0.73	2.5E-01	AJ006345.1	NT	Homo sapiens KVLQ11 gene
5871	18068		0.98	2.5E-01	AL163207.2	NT	Homo sapiens chromosome 21 segment HS21C007
6529	19295	32298	0.95	2.5E-01	AJ251973.1	NT	Homo sapiens partial steerin-1 gene
6845	19427	32442	0.79	2.5E-01	8394138	NT	Rattus norvegicus rabn 3 (RABIN3), mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7252	19938	33011	0.88	2.9E-01	U13992.1	NT	Feline calicivirus CF168 RNA helicase/cysteine protease/RNA-dependent RNA polymerase polyprotein precursor and capsid protein precursor, genes, complete cds; and unknown gene
7278	19962		1.29	2.9E-01	AF134119.1	NT	Mus musculus SKD1 (Skd1) gene, complete cds
7494	20167	33259	0.83	2.9E-01	AF161508.2	NT	Arabidopsis thaliana DNA chromosome 4, config fragment No. 18
7538	20206	33303	3.6	2.9E-01	AF163282.2	NT	Homo sapiens chromosome 21 segment HS21C082
7744	20440	33584	2.47	2.9E-01	BF109040.1	EST_HUMAN	7157a03.x1 Soares_NSF_F8_PW_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3626389 3'
7764	20460	33574	0.8	2.9E-01	BE960712.1	EST_HUMAN	601653391R2 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:3826198 3'
8125	20819	33955	1.87	2.9E-01	BF033595.1	EST_HUMAN	601459238F1 NIH_MGC_60 Homo sapiens cDNA clone IMAGE:3862809 5'
8296	20990	34128	0.7	2.9E-01	P04492	SWISSPROT	E1B PROTEIN, SMALL T-ANTIGEN (E1B 19K)
8534	21228	34368	3.67	2.9E-01	H53236.1	EST_HUMAN	Y98467.1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:202601 5'
8774	21468	34613	0.79	2.9E-01	M88626.1	NT	Mouse testis-specific protein (TPX-1) gene, exon 10
9416	22094	35265	15.72	2.9E-01	U89951.2	NT	Homo sapiens matrix metalloproteinase MMP Rasi-1 gene, promoter region
9416	22094	35266	16.72	2.9E-01	U89951.2	NT	Homo sapiens matrix metalloproteinase MMP Rasi-1 gene, promoter region
9472	22081	35263	2.06	2.9E-01	AF085164.1	NT	Hordeum vulgare receptor-like kinase LRK10 gene, partial cds
9472	22081	35264	2.06	2.9E-01	AF085164.1	NT	Hordeum vulgare receptor-like kinase LRK10 gene, partial cds
9998	22646	35858	1.39	2.9E-01	AW581997.1	EST_HUMAN	RC3-ST0186-130100-016-a07 ST0186 Homo sapiens cDNA
10441	23087	36315	2.13	2.9E-01	AW152248.1	EST_HUMAN	Xq40c10.X1 NCI_CGAP_UH1 Homo sapiens cDNA clone IMAGE:2630034 3' similar to contains Alu repetitive element; contains element MSR1 repetitive element;
10444	23090	36319	1.21	2.9E-01	X58491.1	NT	Mouse L1Md LINE DNA
11013	23685	36845	3.43	2.9E-01	D50914.1	NT	Human mRNA for KIAA0124 gene, partial cds
11647	24244		1.01	2.9E-01	AF027193.1	NT	Homo sapiens sodium/myo-inositol cotransporter (SLC5A3) gene, complete cds
11803	24393	37727	1.29	2.9E-01	U46315.1	NT	Lithosoides sigmoidalis microfilarial sheath protein SHP1a precursor (shp1a) gene, complete cds
11932	24490	37808	5.12	2.9E-01	AF200528.1	NT	Zea mays cellulose synthase-4 (CesA-4) mRNA, complete cds
11960	25388		8.13	2.9E-01	AF161541.2	NT	Arabidopsis thaliana DNA chromosome 4, config fragment No. 41
12365	24768		1.37	2.9E-01	AF000003.1	NT	Pyrococcus horikoshii OT3 genomic DNA, 544001-777000 nt. position (37)
12412	25233	30821	1.37	2.9E-01	AF170072.1	NT	Spodoptera frugiperda CALNLC mRNA, complete cds
540	13323	25955	1.89	2.4E-01	AA936316.1	EST_HUMAN	on70d04.s1 Soares_NFL_T_GBC S1 Homo sapiens cDNA clone IMAGE:1562023 3'
828	13598	26289	3.34	2.4E-01	BF578124.1	EST_HUMAN	602132442F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4271578 5'
1281	14031	26700	33.63	2.4E-01	AJ289880.1	NT	Homo sapiens KIAA0851 gene (partial), X13 gene and LZTFL1 gene
1281	14031	26701	33.63	2.4E-01	AJ289880.1	NT	Homo sapiens KIAA0851 gene (partial), X13 gene and LZTFL1 gene
1363	14111	26785	1.03	2.4E-01	Y17293.1	NT	Homo sapiens FLI-1 gene, partial
1843	14581		32.88	2.4E-01	AF267753.1	NT	Mesembryanthemum crystallinum putative potassium channel protein Mkt1p mRNA, complete cds
1893	14630	27340	1.33	2.4E-01	AF251708.1	NT	Zaocys dhurruvies fructose-1,6-bisphosphatase mRNA, complete cds

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2134	14864	27694	1.1	2.4E-01	AF111188.2	NT	Homo sapiens serine palmitoyl transferase, subunit II gene, complete cds; and unknown genes
2165	14894		1.44	2.4E-01	P45384	SWISSPROT	IMMUNOGLOBULIN A1 PROTEASE PRECURSOR (IGAT1 PROTEASE)
2258	14885	27725	2.28	2.4E-01	AE000680.1	NT	Aquifex acidicus section 12 of 109 of the complete genome
2382	15104	27843	1.38	2.4E-01	BF002171.1	EST_HUMAN	7h23d04.x1 NCL_CGAP_Cot18 Homo sapiens cDNA clone IMAGE:3318907 3' similar to SW:PRSB_XENILA
2539	15254	27994	2.46	2.4E-01	Z36634.1	NT	O42896 26S PROTEASE REGULATORY SUBUNIT 6A ;
2765	15470	28213	2.16	2.4E-01	X71783.1	NT	D.discoideum (Ax2-K) pomA gene
2789	15494	28234	2.84	2.4E-01	AF030154.1	NT	S.pombe swi6 gene
3129	15894		2.94	2.4E-01	U72726.1	NT	Bovine adenovirus 3 complete genome
3145	15909	28554	1.48	2.4E-01	X74209.1	NT	Oryza longistaminata receptor kinase-like protein, family member D, and retrofit (gag/pd) genes, complete cds
3743	16496	29131	0.73	2.4E-01	AE000312.1	NT	H.sapiens AGT gene, PstI fragment of Intron 4
4010	16756		0.74	2.4E-01	D29680.1	NT	Escherichia coli K-12 MG1655 section 202 of 400 of the complete genome
4883	17610		1.09	2.4E-01	AL161589.2	NT	Rattus norvegicus mRNA for alphaB crystallin-related protein, complete cds
4989	17712	30317	0.96	2.4E-01	D00944.1	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 85
5375	18175	30865	0.98	2.4E-01	AI925707.1	EST_HUMAN	Hepatitis C virus genomic RNA for polyprotein, complete cds
5376	18176	30866	0.98	2.4E-01	AI925707.1	EST_HUMAN	w033d05.x1 NCL_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2457129 3'
5397	18197	30891	0.8	2.4E-01	D50671.1	NT	w033d06.x1 NCL_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2457129 3'
5569	18366	31276	8.16	2.4E-01	AF001216.1	NT	Glycine max mRNA for mitotic cyclin b1-type, complete cds
5569	18368	31276	8.16	2.4E-01	AF001216.1	NT	Mus musculus Wm protein (Wm) gene, complete cds
5597	18392		0.77	2.4E-01	IM83377.1	NT	Mus musculus Wm protein (Wm) gene, complete cds
5709	25078		0.99	2.4E-01	AI133836.2	NT	Gallus gallus brain-derived neurotrophic factor (BDNF) gene, 5' end
5805	18595	31520	2.22	2.4E-01	BF592336.1	EST_HUMAN	Branchiostoma floridae mRNA for calmodulin 2 (calM2 gene)
5895	18680	31627	3	2.4E-01	AF035546.1	NT	7f54004.x1 NCL_CGAP_Br16 Homo sapiens cDNA clone IMAGE:3338503 3' similar to SW:SFR4_HUMAN
5899	18760	31741	2.63	2.4E-01	766180.1	NT	Q08170 SPLICING FACTOR, ARGININE/SERINE-RICH 4 ; contains element TAR1 TAR1 repetitive element
6050	18830	31793	0.67	2.4E-01	AV733787.1	EST_HUMAN	;
6441	19209	32206	2.29	2.4E-01	AI999989.1	EST_HUMAN	Drosophila melanogaster p38a MAP kinase gene, complete cds
7243	19228	33004	9.5	2.4E-01	L43001.1	NT	Homo sapiens HSPC142 protein (HSPC142), mRNA
7404	20081	33163	0.65	2.4E-01	IN48732.1	EST_HUMAN	Homo sapiens cDNA clone cdaADE11 5'
7625	20281	33400	0.91	2.4E-01	AF229844.1	NT	w02c11.x1 NCL_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2323220 3' similar to gb:J03484
8247	20641	34078	1.81	2.4E-01	AL012395.1	NT	PROCOLLAGEN ALPHA 2(I) CHAIN PRECURSOR (HUMAN);
							Bos taurus guanylyl cyclase-activating protein 2 (guac2) mRNA, complete cds
							Y55611.r1 Soares_multiple_sclerosis_2NISHMSP Homo sapiens cDNA clone IMAGE:277460 5'
							Mus musculus DXImx48e protein (DXImx48e) mRNA, complete cds
							Tetrahymena thermophila macronuclear gene encoding ribosomal protein L3, exons 1-2

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8497	21189	34332	1.02	2.4E-01	BF242794.1	EST_HUMAN	801877679F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:4108288 5'
8552	21244		0.47	2.4E-01	BF878275.1	EST_HUMAN	802086189F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4250372 5'
9030	21720	34874	0.49	2.4E-01	AL139077.2	NT	Campylobacter jejuni NCTC11168 complete genome; segment 4/6
9030	21720	34875	0.49	2.4E-01	AL139077.2	NT	Campylobacter jejuni NCTC11168 complete genome; segment 4/6
9463	22013	35181	7.01	2.4E-01	AI693515.1	EST_HUMAN	wd43602.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2330808 3' similar to contains MER22.b1 TAR1 repetitive element;
9603	22256	35441	0.88	2.4E-01	AF220087.1	NT	Drosophila melanogaster SKPB gene, complete cds
9603	22256	35442	0.88	2.4E-01	AF220087.1	NT	Drosophila melanogaster SKPB gene, complete cds
10337	22984	36202	1.06	2.4E-01	Q03692	SWISSPROT	COLLAGEN ALPHA 1(X) CHAIN PRECURSOR
10697	23358	36598	4.8	2.4E-01	AL191494.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 6
10739	23428	36871	1.39	2.4E-01	AF030199.1	NT	Mus musculus type 1 sigma receptor gene, complete cds
11158	23825		2.09	2.4E-01	Z21647.1	NT	P. asiatica mosaic virus genomic RNA
11840	24424	37785	1.32	2.4E-01	BE817638.1	EST_HUMAN	801441421T1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3845836 3'
11891	24461	37801	1.75	2.4E-01	AF217491.1	NT	Homo sapiens fragile 16D addo reductase (FOR) gene, exon 6
12019	25180		2.34	2.4E-01	AF004213.1	NT	Arabidopsis thaliana ethylene-inactivating3-like1 (EIL1) mRNA, complete cds
12080	24588		2.74	2.4E-01	AJ278191.1	NT	Mus musculus mRNA for putative mc7 protein (mc7 gene)
12287	25162		1.97	2.4E-01	V01507.1	NT	Gallus gallus gene coding for e-actin
12400	25201		2.08	2.4E-01	BF184542.1	EST_HUMAN	801842848F1 NIH_MGC_54 Homo sapiens cDNA clone IMAGE:4083739 5'
12720	24982		3.86	2.4E-01	AL163281.2	NT	Homo sapiens chromosome 21 segment HS21C081
390	13187	25810	1.06	2.3E-01	S75988.1	NT	aromatase [P. cephalis guttata=zebra finches, ovary, mRNA, 3188 nt]
622	13401		5	2.3E-01	U39713.1	NT	Mycoplasma genitalium section 35 of 51 of the complete genome
652	13430	26069	33.31	2.3E-01	U67598.1	NT	Methanococcus jannaschii section 138 of 160 of the complete genome
913	13680	26341	4.19	2.3E-01	BE311893.1	EST_HUMAN	801142073F1 NIH_MGC_14 Homo sapiens cDNA clone IMAGE:3505818 5'
1558	14305		1.12	2.3E-01	U22837.2	NT	Yersinia pestis HmsH (hmsH), HmsF (hmsF), HmsR (hmsR), and HmsS (hmsS) genes, complete cds
1599	14345	27035	1.23	2.3E-01	AJ245480.1	NT	Brassica napus alg gene for S-locus glycoprotein, cultivar T2
1628	14374	27063	2.74	2.3E-01	Y10887.2	NT	Mus musculus cdh5 gene, exon 1, partial
2038	14772		1.51	2.3E-01	AJ235933.1	NT	Homo sapiens partial intron 3 of the wild type AF-4/FEL gene
2447	15106	27803	2.66	2.3E-01	BE287718.1	EST_HUMAN	801175552F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3531015 5'
2657	15367	28105	1.59	2.3E-01	M11319.1	NT	Human erythropoietin gene, complete cds
2827	14114	26789	3.38	2.3E-01	AB015033.1	NT	Martellibilia agriocarpa gyrB gene for DNA gyrase subunit B, partial cds, strain:IFO 14957
2963	15729	28379	1.36	2.3E-01	AA001379.1	EST_HUMAN	no18008.s1 NC1 CGAP_Phe1 Homo sapiens cDNA clone IMAGE:1100843 3' similar to contains Alu repetitive element; contains element TH-R repetitive element;
3082	15847		7.07	2.3E-01	R21732.1	EST_HUMAN	yh21507.s1 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:130357 3'

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3363	16122	28780	1.14	2.3E-01	H69836.1	EST_HUMAN	y97h10.1 Scores fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:213283 5'
3821	16573	29205	1.01	2.3E-01	S82821.1	NT	GSTA5=glutathione S-transferase Yc2 subunit (5' region, intron 1) [Rats, Morris hepatoma cell line, Genomic, 2212 nt, segment 1 of 3]
3914	16964		5.22	2.3E-01	7862133	NT	Homo sapiens KIAA0450 gene product (KIAA0450), mRNA
4316	17055	29680	1.1	2.3E-01	R82252.1	EST_HUMAN	M1701.1 Scores placenta Nb2H-IP Homo sapiens cDNA clone IMAGE:149017 5'
4368	17106		1.98	2.3E-01	L78789.1	NT	Mus musculus tenin (Ren-1c) gene, promoter region
4417	17163	29784	1.03	2.3E-01	D90890.1	NT	Synechocystis sp. PCC6803 complete genome, 1/27, 1-133859
4454	17190	29816	2.51	2.3E-01	AF092535.1	NT	Homo sapiens mitogen-activated protein kinase p38delta (PRKM13) mRNA, complete cds
4517	17252	29887	6.19	2.3E-01	5031984	NT	Homo sapiens nuclear transport factor 2 (placental protein 15) (PP-15) mRNA
4988	17711	30316	0.84	2.3E-01	AB032400.1	NT	Mus musculus tulip 1 mRNA, complete cds
5221	18028	30654	2.83	2.3E-01	AB040945.1	NT	Homo sapiens mRNA for KIAA1512 protein, partial cds
5343	18148	30825	2.06	2.3E-01	BF088381.1	EST_HUMAN	713006.1 NCI_CGAP_Ov18 Homo sapiens cDNA clone IMAGE:3476699 3' similar to SW:GAG_SMSAV
5443	18242	31130	4.58	2.3E-01	X96687.1	NT	P03330 GAG POLYPROTEIN [CONTAINS: CORE PROTEIN P15; INNER COAT PROTEIN P12; CORE
5563	18380		0.94	2.3E-01	L30112.1	NT	SHELL PROTEIN P30; NUCLEOPROTEIN P10]. ;
5685	18480	31374	0.76	2.3E-01	S60371.1	NT	G.familialis rom1 gene
5851	18638	31575	1.59	2.3E-01	A1708840.1	EST_HUMAN	Vitis vinifera corneum small subunit ribosomal RNA gene
5851	18638	31575	1.59	2.3E-01	A1708840.1	EST_HUMAN	23S rRNA [Leuconostoc carnosum, Genomic, 2866 nt]
6558	19323	32330	0.83	2.3E-01	AF198089.1	NT	as27e12.1 Barstead aorta HPLRB6 Homo sapiens cDNA clone IMAGE:2318446 3' similar to gb:X13238
6778	19622	32549	4.33	2.3E-01	A1718148.1	EST_HUMAN	CYTTOCHROME C OXIDASE POLYPEPTIDE VIC PRECURSOR (HUMAN);
7011	19703	32759	1.08	2.3E-01	8923323	NT	as27e12.1 Barstead aorta HPLRB6 Homo sapiens cDNA clone IMAGE:2318446 3' similar to gb:X13238
7186	19874	32947	0.9	2.3E-01	AF000227.1	NT	CYTTOCHROME C OXIDASE POLYPEPTIDE VIC PRECURSOR (HUMAN);
7315	19988	33077	3.14	2.3E-01	AF176389.1	NT	Oryctolagus cuniculus cytochrome oxidase subunit VIa (coxVIa2) mRNA, complete cds; nuclear gene for
7318	20001	33079	0.64	2.3E-01	AV719681.1	EST_HUMAN	mitochondrial product
7318	20001	33080	0.64	2.3E-01	AV719681.1	EST_HUMAN	as42f12.1 Barstead aorta HPLRB6 Homo sapiens cDNA clone IMAGE:2319887 3' similar to contains Alu
7508	20179		2.94	2.3E-01	6764779	NT	repetitive element
7513	20184	33278	1.38	2.3E-01	BE888071.1	EST_HUMAN	Homo sapiens hypothetical protein FLJ20345 (FLJ20345), mRNA
7652	20316		2.73	2.3E-01	N80883.1	EST_HUMAN	Sesuviae cereale omega seedling gene, complete cds
7750	20446	33569	0.71	2.3E-01	AL161558.2	NT	Glycine max resistance protein LM17 precursor RNA, partial cds

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7892	20587	33717	2.16	2.3E-01	M8831.1	NT	Oxytricha nova macronuclear telomere-binding protein alpha subunit (tel-alpha aiarine version) gene, complete cds
8391	21084	34217	0.47	2.3E-01	U57968.1	NT	Mus musculus prosaposin (psap/SGP-1) gene, complete cds
8671	21383	34510	0.56	2.3E-01	AW090541.1	EST_HUMAN	xs90e08.x1 NC1 CGAP_Bm35 Homo sapiens cDNA clone IMAGE:2891554 3'
8786	21478	34627	0.45	2.3E-01	AW984460.1	EST_HUMAN	EST376533 MAGE resequences, MAGH Homo sapiens cDNA
9039	21729	34883	1.02	2.3E-01	AA372164.1	EST_HUMAN	EST84081 Rhabdomyosarcoma Homo sapiens cDNA 5' end similar to DnaJ homolog (GB:X63368)
9039	21729	34884	1.02	2.3E-01	AA372164.1	EST_HUMAN	EST84081 Rhabdomyosarcoma Homo sapiens cDNA 5' end similar to DnaJ homolog (GB:X63368)
9480	22133	35313	0.82	2.3E-01	6679318	NT	Mus musculus phosphatidylinositol 3-kinase catalytic subunit delta (Pik3cd), mRNA
9609	22262	35448	0.82	2.3E-01	U77974.1	NT	Tribolium castaneum transcription factor homolog (Tc-ene) gene, complete cds
9628	22281	35471	0.5	2.3E-01	BE277890.1	EST_HUMAN	601120110F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:2866739 5'
9682	22334	35529	0.59	2.3E-01	AW984460.1	EST_HUMAN	EST376533 MAGE resequences, MAGH Homo sapiens cDNA
9731	22382	35584	1.02	2.3E-01	X52124.1	NT	Haemophilus influenzae genes for HincII restriction-modification system (HincII methyltransferase (EC 2.1.1.72) and HincII endonuclease (EC 3.1.21.4))
9787	22418	35625	0.59	2.3E-01	AW364633.1	EST_HUMAN	PM2-DT0036-281298-001-f04 DT0036 Homo sapiens cDNA
9834	22485	35688	2.45	2.3E-01	BE173060.1	EST_HUMAN	MRQ-HT0556-240400-014-g11 HT0556 Homo sapiens cDNA
9892	22542	35734	2.75	2.3E-01	AJ293281.1	NT	Rhizobium leguminosarum partial genomic DNA for exopolysaccharide biosynthesis genes
10340	22987	36205	0.84	2.3E-01	AF201928.1	NT	Murine hepatitis virus strain 2, complete genome
10351	22988		5.11	2.3E-01	BF133577.1	EST_HUMAN	601846155R2 NIH_MGC_59 Homo sapiens cDNA clone IMAGE:4102082 3'
10937	23617	36887	1.49	2.3E-01	AF004833.1	NT	Mus musculus tissue factor pathway inhibitor (TFPI) mRNA, complete cds
10937	23617	36888	1.49	2.3E-01	AF004833.1	NT	Mus musculus tissue factor pathway inhibitor (TFPI) mRNA, complete cds
11144	23811	37092	1.77	2.3E-01	AJ250189.1	NT	Mus musculus partial mRNA for muscle protein 534 (mg534 gene)
11144	23811	37093	1.77	2.3E-01	AJ260189.1	NT	Mus musculus partial mRNA for muscle protein 534 (mg534 gene)
11324	24015	37318	3.03	2.3E-01	AE002167.2	NT	Chlamydia pneumoniae AF39, section 4 of 94 of the complete genome
11815	24403		1.75	2.3E-01	AV709736.1	EST_HUMAN	AV709736 ADC Homo sapiens cDNA clone ADCAGH01 5'
11855	24439		1.33	2.3E-01	6006010	NT	Homo sapiens Integrin, alpha 3 (antigen CD49C, alpha 3 subunit of VLA-3 receptor) (ITGA3), transcript variant b, mRNA
12004	24539		4.47	2.3E-01	U45426.1	NT	Borrelia burgdorferi 2.9-6 locus, ORF-A-D genes, complete cds and REP+ gene, partial cds
12088	24593		4.88	2.3E-01	T27231.1	EST_HUMAN	HCOEST44 HT29M6 Homo sapiens cDNA clone HCOE44 5'
12120	24612		1.62	2.3E-01	AW863940.1	EST_HUMAN	PM4-SN0012-030400-001-b06 SN0012 Homo sapiens cDNA
12173	25319	30711	2.98	2.3E-01	AW303623.1	EST_HUMAN	xx21d07.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2813773 3' similar to TR:Q8Z175
12206	25368	30813	5.63	2.3E-01	BE882464.1	EST_HUMAN	Q9Z175 LYSYL OXIDASE-RELATED PROTEIN 2, contains PTR5.b2 TAR1 repetitive element ;
12255	24701		2.51	2.3E-01	BF663319.1	EST_HUMAN	601507202F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3908689 5'
							602144459F1 NIH_MGC_48 Homo sapiens cDNA clone IMAGE:4297719 5'

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12303	24728		2.36	2.3E-01	AJ006519.1	NT	Rattus norvegicus mRNA for acid gated ion channel
12398	24784		1.78	2.3E-01	AJ006545.1	NT	Pleurodeles walli distal-less like protein PwDlx-3 (PwDlx-3) mRNA, complete cds
12403	24728		1.55	2.3E-01	AJ006519.1	NT	Rattus norvegicus mRNA for acid gated ion channel
12047	24952		2	2.3E-01	BF475011.1	EST_HUMAN	nec3h12.x1 Lupoid_sclerotic_nerve Homo sapiens cDNA clone IMAGE:3395950 3' similar to contains element MER38 repetitive element;
88	12914	25552	1.63	2.2E-01	A052190.1	EST_HUMAN	ox14rt10.x1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:1678290 3' similar to TRCQ13040 Q13040 ATP-BINDING CASSETTE PROTEIN;
1557	14304	20893	1.64	2.2E-01	AF187850.1	NT	Homo sapiens PPAR delta gene, promoter region
2082	14814	27547	2.52	2.2E-01	M34840.1	NT	Fresh-water sponge Eimf1 alpha collagen (COLF1) gene
2402	15123	27860	6.3	2.2E-01	BF677538.1	EST_HUMAN	602085608F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4249989 5'
2594	15308	28044	2.02	2.2E-01	BE518298.1	EST_HUMAN	601462620F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3868190 5'
2594	15308	28045	2.02	2.2E-01	BE518298.1	EST_HUMAN	601462620F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3868190 5'
2884	15651	28294	4.36	2.2E-01	BE165925.1	EST_HUMAN	PM2-HT0363-281299-003-art12 HT0363 Homo sapiens cDNA
2884	15651	28295	4.36	2.2E-01	BE156025.1	EST_HUMAN	PM2-HT0353-281299-003-art12 HT0353 Homo sapiens cDNA
2021	15887		1.57	2.2E-01	AF020603.1	NT	Homo sapiens FRA3B common fragile region, diadenosine triphosphatase hydrolase (FHIT) gene, exon 5
3387	16146		1.97	2.2E-01	AL101562.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 62
3784	18546		1.12	2.2E-01	AF155728.1	NT	Xiphophorus maculatus truncated Rex1 retrotransposon reverse transcriptase (RT) pseudogene
4105	16848		0.72	2.2E-01	U68174.1	NT	Mus musculus breast/ovarian cancer susceptibility protein (BRCA1) mRNA, complete cds
4194	18635	29562	6.45	2.2E-01	AF155142.1	NT	Mus musculus mixed lineage kinase 3 (Mlik3) and two pore domain K+ channel subunit (Kcnk10) genes, complete cds
4232	16973	29597	2.11	2.2E-01	AF117340.1	NT	Mus musculus MAP kinase kinase kinase 1 (Mekkk1) mRNA, complete cds
4232	16973	29598	2.11	2.2E-01	AF117340.1	NT	Mus musculus MAP kinase kinase kinase 1 (Mekkk1) mRNA, complete cds
4323	17062	29689	1.21	2.2E-01	U01907.1	NT	Human scRNA (BC200 beta) pseudogene
4323	17062	29690	1.21	2.2E-01	U01907.1	NT	Human scRNA (BC200 beta) pseudogene
4715	17507		1.38	2.2E-01	D68004.1	NT	Human beta-cytoplasmic actin (ACTBP9) pseudogene
4779	17511	30133	2.1	2.2E-01	AA211216.1	EST_HUMAN	z087c05.r1 Stragene INT neuron (8037233) Homo sapiens cDNA clone IMAGE:048988 5'
4982	17705		1.7	2.2E-01	L13299.1	NT	Mus musculus vinculin gene, exon 3
5062	17781		0.93	2.2E-01	S57565.1	NT	histamine H2-receptor [rat, Genomic, 1928 nt]
5140	17858	30474	2.64	2.2E-01	5535974	NT	Vicia chalybeata mitochondrion, complete genome
5659	18454	31388	2.07	2.2E-01	5803002	NT	Homo sapiens diaphanous (Drosophila, homolog) 2 (DIAPH-2), transcript variant 156, mRNA
5689	18464		4.5	2.2E-01	D64000.1	NT	Synechocystis sp. PCC6803 complete genome, 19/27, 2392729-25339599
5910	18694	31645	0.56	2.2E-01	U67087.1	NT	Gallus gallus T-box containing protein (Ch-TbxT) mRNA, complete cds
5910	18694	31647	0.56	2.2E-01	U67087.1	NT	Gallus gallus T-box containing protein (Ch-TbxT) mRNA, complete cds

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6006	19369	32381	0.73	2.2E-01	AB039490.1	NT	Homo sapiens gene for fukutin, complete cds
6026	19602	32708	10.21	2.2E-01	AV750238.1	EST_HUMAN	AV750238 BM Homo sapiens cDNA clone BMFAHC06 5'
7029	19721	32777	1.28	2.2E-01	AF082738.1	NT	Streptococcus pyogenes phosphatidylglycerophosphate synthase (pgsA) and ABC transporter ATP-binding protein (atpA) genes, complete cds; and unknown genes
7029	19721	32778	1.28	2.2E-01	AF082738.1	NT	Streptococcus pyogenes phosphatidylglycerophosphate synthase (pgsA) and ABC transporter ATP-binding protein (atpA) genes, complete cds; and unknown genes
7191	19877	32850	1.86	2.2E-01	M24136.1	NT	Human glycoprotein B gene, exon 4
7191	19877	32951	1.86	2.2E-01	M24136.1	NT	Human glycoprotein B gene, exon 4
7386	20066	33144	0.63	2.2E-01	AE000035.2	NT	Mycoplasma pneumoniae M120 section 45 of 63 of the complete genome
7628	20294	33402	0.66	2.2E-01	AB024553.1	NT	Bacillus halodurans DNA, complete and partial cds, strain: C-125
7919	20814		2.04	2.2E-01	AF155143.1	NT	Mus musculus m23-M1 gene, promoter region
7987	20882	33808	1.01	2.2E-01	Z49933.1	NT	E.coli sepA and sepB genes
8449	21141	34279	0.64	2.2E-01	AJ132916.1	NT	Par troglodytes MecP2 gene 3'UTR
8794	21486	34632	3.53	2.2E-01	AE001713.1	NT	Thermotoga maritima section 25 of 138 of the complete genome
8920	21611		4.35	2.2E-01	AW85039.1	EST_HUMAN	PM3-CT0263-241299-009-b07 CT0263 Homo sapiens cDNA
9013	21703	34853	1.45	2.2E-01	8393247	NT	Mus musculus deformed epidermal autoregulatory factor 1 (Drocephila) (Deaf1), mRNA
9098	21786	34952	1.04	2.2E-01	BF376354.1	EST_HUMAN	MR1-TN0045-110900-009-c02 TN0045 Homo sapiens cDNA
9189	21859	35024	1.36	2.2E-01	W02988.1	EST_HUMAN	z0408.11 Soares melanocyte 2NblHM Homo sapiens cDNA clone IMAGE:291591 5'
9207	22086	35259	13.43	2.2E-01	P48634	SWISSPROT	LARGE PROLINE-RICH PROTEIN BAT2 (HLA-B-ASSOCIATED TRANSCRIPT 2)
9252	21831	35104	0.69	2.2E-01	AJ009639.1	NT	Xenopus laevis mRNA for kinesin-like protein 3 (xktp3)
9263	22017	35185	0.81	2.2E-01	7657428	NT	Mus musculus osteoblast specific factor 2 (OSF-2), mRNA
9276	22030	35200	3.95	2.2E-01	M89643.1	NT	Brehydratio nrio sperdylnth beta and gamma chains (Epd) gene, complete cds
9521	22174	35358	0.58	2.2E-01	Q80980	SWISSPROT	CYCLIC NUCLEOTIDE GATED CHANNEL, ROD PHOTORECEPTOR, ALPHA SUBUNIT (CNG CHANNEL 3) (CNG-3) (CNG3)
9716	22366	35594	3.4	2.2E-01	AF197941.1	NT	Funaria hygrometrica chloroplast-localized small heat shock protein (CPa-HSP21) mRNA, complete cds; nuclear gene for chloroplast product
9853	22503	35703	1.85	2.2E-01	BF206507.1	EST_HUMAN	60189724F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4100189 5'
10076	22724	35941	0.95	2.2E-01	9825671	NT	Human herpesvirus 6, complete genome
10232	22880	36092	0.5	2.2E-01	T59472.1	EST_HUMAN	y63408.11 Stragene ovary (#637217) Homo sapiens cDNA clone IMAGE:75855 5'
10232	22880	36093	0.5	2.2E-01	T59472.1	EST_HUMAN	y63408.11 Stragene ovary (#637217) Homo sapiens cDNA clone IMAGE:75855 5'
							Pseudomonas aeruginosa quinoprotein ethanol dehydrogenase (eadA) gene, partial cds; cytochrome c550 precursor (eadB), NAD+ dependent acetaldehyde dehydrogenase (eadC), and pyrroloquinone synthase A (pqoA) genes, complete cds; and pyrodoquin>
10266	22916	36126	0.58	2.2E-01	AF086294.1	NT	Mus musculus PHR1 (Phr1) gene, partial cds
10341	22988		0.61	2.2E-01	AF071001.1	NT	



Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10387	23033	36247	0.6	2.2E-01	AE001562.1	NT	Helicobacter pylori, strain J99 section 123 of 132 of the complete genome
10387	23033	36248	0.6	2.2E-01	AE001562.1	NT	Helicobacter pylori, strain J99 section 123 of 132 of the complete genome
10520	23168	36394	0.48	2.2E-01	AF049720.1	NT	Homo sapiens neuronal nitric oxide synthase (NOS1) gene, alternative exons 11 and AS
11070	23740	37014	1.58	2.2E-01	AF257772.1	NT	Homo sapiens RNA binding protein MCG10 gene, complete cds, alternatively spliced
11164	23831	37110	1.46	2.2E-01	AB021063.1	NT	TT virus ORF1 gene, isolate TS4-II, partial cds
11399	24005	37309	4.83	2.2E-01	X01018.1	NT	Drosophila 68C glue gene cluster
11438	23205	36437	5.22	2.2E-01	7708215	NT	Homo sapiens H-2K binding factor-2 (LOC51680), mRNA
11835	24493		1.65	2.2E-01	BE870859.1	EST_HUMAN	601448957F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3850670 5'
							Homo sapiens chromosome Xq28 melanoma antigen family A2a (MAGEA2A), melanoma antigen family A12 (MAGEA12), melanoma antigen family A2b (MAGEA2B), melanoma antigen family A3 (MAGEA3), calretinin (CALT), NAD(P)H dehydrogenase-like protein (NSDHL), and Lp
12040	25380		2.21	2.2E-01	U82871.2	NT	Vitis vinifera cultivar Pinot Noir plasma membrane aquaporin (PIP1a) mRNA, complete cds
12123	24815		2.19	2.2E-01	AF189843.1	NT	RC1-CT0249-141199-021-g04 CT0249 Homo sapiens cDNA
12225	17904	30591	3.87	2.2E-01	AW361098.1	EST_HUMAN	h17002.x1 NCI_OGAP_GU1 Homo sapiens cDNA clone IMAGE:2972523 3'
12226	24681		1.6	2.2E-01	AW661922.1	EST_HUMAN	AV684801 GKC Homo sapiens cDNA clone GKCAH02 5'
12731	25371		2.58	2.2E-01	AV694801.1	EST_HUMAN	nm31e11.s1 NCI_OGAP_Lp2 Homo sapiens cDNA clone IMAGE:1061804
950	13718	26382	2.12	2.1E-01	AA568286.1	EST_HUMAN	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 16
953	13718	26384	0.77	2.1E-01	AL161504.2	NT	Chlamydia muridarum, section 45 of 65 of the complete genome
1102	13859		2.76	2.1E-01	AE002314.2	NT	Mus musculus interferon (alpha and beta) receptor 2 (lifer2), mRNA
1176	13929	26593	1.15	2.1E-01	6754290	NT	Mus musculus interferon (alpha and beta) receptor 2 (lifer2), mRNA
1176	13929	26594	1.15	2.1E-01	6754298	NT	dk73602.s1 NCI_OGAP_G04 Homo sapiens cDNA clone IMAGE:1519610 3' similar to gb:K02765
1906	14643	27353	2.07	2.1E-01	AA909824.1	EST_HUMAN	COMPLEMENT C3 PRECURSOR (HUMAN);
2152	14882	27616	4.2	2.1E-01	BF695073.1	EST_HUMAN	602083129F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4247603 6'
2485	15596	27942	1	2.1E-01	H73968.1	EST_HUMAN	y004f07.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:232837 3'
2485	15598	27943	1	2.1E-01	H73968.1	EST_HUMAN	y004f07.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:232837 3'
2556	15270	28005	0.91	2.1E-01	AF022814.1	NT	Fugu rubripes transcription factor (SLP-1) and home-oxigenase genes, complete cds
2925	15691	28335	2.3	2.1E-01	6812445	NT	Homo sapiens potassium voltage-gated channel, subfamily H (esk-related), member 4 (KCNH4), mRNA
3786	16538		6.08	2.1E-01	9838361	NT	Beta vulgaris mitochondrion, complete genome
4032	16777	28406	1.1	2.1E-01	P11675	SWISSPROT	IMMEDIATE-EARLY PROTEIN IE180
4032	16777	28409	1.1	2.1E-01	P11675	SWISSPROT	IMMEDIATE-EARLY PROTEIN IE180
4343	17082		1.77	2.1E-01	AB033041.1	NT	Homo sapiens mRNA for KIAA1215 protein, partial cds
4537	17272	28904	1.23	2.1E-01	AB010273.1	NT	Homo sapiens pshp47 gene, complete cds
5013	17734	30341	1.4	2.1E-01	Q01338	SWISSPROT	ALPHA-2A ADRENERGIC RECEPTOR (ALPHA-2A ADRENOCEPTOR) (ALPHA-2AAR)

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5090	17809	30425	1.09	2.1E-01	AE001628.1	NT	Helicobacter pylori, strain J99 section 87 of 132 of the complete genome
5218	18028	30950	0.24	2.1E-01	BF672095.1	EST_HUMAN	602152001F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4283001 5'
6787	19631	32559	1.4	2.1E-01	AJ223392.1	NT	Dodo fragilis mitochondrial 16S rRNA gene, partial
6788	19459	32481	1.82	2.1E-01	U04842.1	NT	Human olfactory receptor (OR17-2) gene, partial cds
7306	19689	33085	0.85	2.1E-01	Q01856	SWISSPROT	VOLTAGE-GATED POTASSIUM CHANNEL PROTEIN KV3.3 (KSHIIID)
7306	19689	33086	0.85	2.1E-01	Q01856	SWISSPROT	VOLTAGE-GATED POTASSIUM CHANNEL PROTEIN KV3.3 (KSHIIID)
7317	20000		2.38	2.1E-01	AE000972.1	NT	Archaeoglobus fulgidus section 135 of 172 of the complete genome
7608	20272	33380	1.84	2.1E-01	AF000949.1	NT	Canis familiaris keratin (KRT9) gene, complete cds
7651	20315	33425	1.22	2.1E-01	AF068887.1	NT	Glycine max malate dehydrogenase (Mdh-2) gene, nuclear gene encoding mitochondrial protein, partial cds
7651	20315	33426	1.22	2.1E-01	AF068887.1	NT	Glycine max malate dehydrogenase (Mdh-2) gene, nuclear gene encoding mitochondrial protein, partial cds
7971	20888		1.21	2.1E-01	7305030	NT	Mus musculus erythrocyte protein band 4.1-like 3 (Epb4.1l3), mRNA
8400	21093	34229	4.44	2.1E-01	U68309.1	NT	Haemophilus influenzae hmcD, putative haemochromin processing protein (hmcC), putative ABC transporter (hmcB), putative haemochromin structural protein (hmcA), and haemochromin immunity protein (hmcI) genes, complete cds
8696	21388	34531	0.86	2.1E-01	AL040537.1	EST_HUMAN	DKFZp434H0614_r1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434H0614 5'
8696	21388	34532	0.86	2.1E-01	AL040537.1	EST_HUMAN	DKFZp434H0614_r1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434H0614 5'
8857	21548		0.45	2.1E-01	AB022624.1	NT	Homo sapiens APCL gene, exon 9
8836	21628	34788	5.68	2.1E-01	Z35786.1	NT	S.cerevisiae chromosome II reading frame ORF YBL025w
9404	22066	35237	0.57	2.1E-01	N42538.1	EST_HUMAN	yy11e10.r1 Soares melanocyte 2NbHM Homo sapiens cDNA clone IMAGE:270654 5'
9404	22066	35238	0.57	2.1E-01	N42538.1	EST_HUMAN	yy11e10.r1 Soares melanocyte 2NbHM Homo sapiens cDNA clone IMAGE:270654 5'
9413	22061	35262	2.31	2.1E-01	X97378.1	NT	A.thaliana mRNA for AtRBP1b protein
9518	22171	35354	1.13	2.1E-01	AB039529.1	NT	Homo sapiens p53R2 gene for ribonucleotide reductase, exon 6
10227	22875	36088	1.47	2.1E-01	Z97087.1	NT	Beta vulgaris mRNA for elongation factor 1-beta
10258	22906	36116	2.5	2.1E-01	P52824	SWISSPROT	DIACYLGLYCEROL KINASE, DELTA (DIGLYCERIDE KINASE) (DGK-DELTA) (DAG KINASE DELTA)
10284	22912	36122	0.97	2.1E-01	BF574254.1	EST_HUMAN	602131427F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4270831 5'
11554	24153		2.19	2.1E-01	11038647	NT	Homo sapiens pancreatic polypeptide 2 (PPY2), mRNA
11572	24171	37487	1.59	2.1E-01	BE180422.1	EST_HUMAN	RC3-HT0622-04500-013-011 HT0622 Homo sapiens cDNA
11870	24944		1.38	2.1E-01	X57924.1	NT	Drosophila melanogaster ALA-E6 DNA, repeat region
12377	24775		2.07	2.1E-01	AF217490.1	NT	Homo sapiens fragile 18D addo reductase (FOR) gene, exons 8, 9, and partial cds
12578	25287		1.47	2.1E-01	L32588.1	NT	Human granulins gene
12635	24935		1.42	2.1E-01	BE622149.1	EST_HUMAN	601440712F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3915975 5'

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12768	25019	30960	1.79	2.1E-01	BE672330.1	EST_HUMAN	7a56e02x1 NCI_CGAP_GC6 Homo sapiens cDNA clone IMAGE:3223034 3'
196	13008	28650	2.43	2.0E-01	AB017437.1	NT	Gallus gallus mRNA for avian, complete cds
521	13305		3.11	2.0E-01	7706001	NT	Homo sapiens CGI-18 protein (LOC51008), mRNA
683	13458	28103	1.24	2.0E-01	M77085.1	NT	O. cuniculus gemline lgh heavy chain V-H pseudogene, allotype VH2
792	13504	28225	2.19	2.0E-01	AF027865.1	NT	Mus musculus Major Histocompatibility Locus class II region
901	13753	28414	1.09	2.0E-01	D69006.1	NT	Synechococcus sp. PC08803 complete genome, 7/27, 781449-820916
1103	13880	28518	2.47	2.0E-01	AL163213.2	NT	Homo sapiens chromosome 21 segment HS21C013
1232	13981	28651	1.77	2.0E-01	AJ132895.5	NT	Homo sapiens rac1 gene
1285	14035	28706	1.63	2.0E-01	AW384937.1	EST_HUMAN	PM1-HIT0422-201299-002-c06 HIT0422 Homo sapiens cDNA
1443	14180		1.52	2.0E-01	AJ243957.1	NT	Plum pox virus strain M, complete genome, isolate PS
1470	14217	28904	14.63	2.0E-01	4503408	NT	Homo sapiens dystrobrevin, alpha (DTNA), mRNA
1544	14200	28977	1.97	2.0E-01	AB007974.1	NT	Homo sapiens mRNA, chromosome 1 specific transcript KIAA0505
1550	14286	28983	1.01	2.0E-01	AF260700.1	NT	Homo sapiens sodium/folate symporter mRNA, partial cds
1682	14438	27132	1.4	2.0E-01	U22346.1	NT	Human bradykinin B1 receptor (bradyb1) gene, complete cds
1712	14455		1.87	2.0E-01	AF111170.3	NT	Homo sapiens 14q32 Jagged2 gene, complete cds; and unknown gene
1752	14494		4.33	2.0E-01	U67525.1	NT	Methanococcus jannaschii section 87 of 150 of the complete genome
1883	14620	27329	1.12	2.0E-01	BE871330.1	EST_HUMAN	601449441F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:38533330 5'
1883	14620	27330	1.12	2.0E-01	BE871330.1	EST_HUMAN	601449441F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:38533330 6'
2347	15070		1.63	2.0E-01	X82877.1	NT	H. sapiens Net-D-glucose cotransport regulator gene
3555	16310		0.71	2.0E-01	AW238005.1	EST_HUMAN	xp15b02x1 NCI_CGAP_HNG Homo sapiens cDNA clone IMAGE:2740395 3' similar to contains element
3683	16447	29087	0.89	2.0E-01	P34641	SWISSPROT	MER21 repetitive element ;
3822	16574	29206	1.12	2.0E-01	AL163204.2	NT	CED-11 PROTEIN
3936	16688	29327	0.76	2.0E-01	Z46908.1	NT	Homo sapiens chromosome 21 segment HS21C004
4528	17283		8.49	2.0E-01	BE828165.1	EST_HUMAN	Sus scrofa
4979	17702	30309	5.26	2.0E-01	8922080	NT	QV4-EN0032-180600-223-c03 EN0032 Homo sapiens cDNA
5009	18237	28893	0.8	2.0E-01	P46807	SWISSPROT	Homo sapiens hypothetical protein ASH1 (ASH1), mRNA
5359	18161	30845	2.63	2.0E-01	X56600.1	NT	HOMEBOX PROTEIN GLABRA2 (HOMEBOX-LEUCINE ZIPPER PROTEIN ATHB-10) (HD-ZIP
5655	18450	31363	1.94	2.0E-01	11432540	NT	PROTEIN ATHB-10)
5750	18542	31464	0.76	2.0E-01	X91866.1	NT	Rat SOD-2 gene for manganese-containing superoxide dismutase
5989	18751	31712	6.3	2.0E-01	U15300.1	NT	Homo sapiens dual oxidase-like domains 2 (DUOX2), mRNA
6081	18860		0.73	2.0E-01	M75067.1	NT	F. rubripes DNA encoding for vely-IRNA synthetase
6192	18968	31943	0.79	2.0E-01	P02467	SWISSPROT	Saccharomyces cerevisiae Hal5p (HAL5) mRNA, complete cds
							Human hepatocyte growth factor gene, exon 1
							COLLAGEN ALPHA 2(I) CHAIN PRECURSOR

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6335	18105	32094	3.2	2.0E-01	X61033.1	NT	M. auratus mu class glutathione transferase gene
6435	19203	32200	4.02	2.0E-01	AW360865.1	EST_HUMAN	PM1-CT0247-141099-007-906 CT0247 Homo sapiens cDNA
7194	19880	32954	1.28	2.0E-01	AF250371.1	NT	Mus musculus phosphofructokinase-1 C isozyme (Pfic) gene, exons 3 through 7
7345	20028	33102	0.68	2.0E-01	P54422	SWISSPROT	GAMMA-GLUTAMYL TRANSPEPTIDASE PRECURSOR
7676	20339	33452	0.84	2.0E-01	V00726.1	NT	Mouse germ line gene coding for beta-globin (Y2)
7853	20548		5.8	2.0E-01	AF028028.1	NT	Andes virus strain OI23133 glycoprotein G1 and G2 precursor, gene, partial cds
8100	20794	33925	2.95	2.0E-01	X91151.1	NT	M. musculus scp2 gene exon 14
8924	21316		0.99	2.0E-01	BE562247.1	EST_HUMAN	601344648F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3677794.5
9251	21930	35103	0.82	2.0E-01	U82511.1	NT	Dictyostelium discoideum random slug cDNA19 protein (rec19) mRNA, partial cds
9290	21957	35129	0.68	2.0E-01	U71122.1	NT	Arabidopsis pyruvate decarboxylase-2 (Pdc2) gene, complete cds
9456	22006		4.97	2.0E-01	AE001278.1	NT	Chlamydia trachomatis section 5 of 87 of the complete genome
9646	22298	35493	0.65	2.0E-01	P11420	SWISSPROT	DAUGHTERLESS PROTEIN
9646	22298	35494	0.65	2.0E-01	P11420	SWISSPROT	DAUGHTERLESS PROTEIN
9791	22442		2.11	2.0E-01	AF140692.1	NT	Homo sapiens filamin 2 (FLN2) mRNA, complete cds
9941	22589	35792	1.98	2.0E-01	AF089007.1	NT	Arabidopsis thaliana root gravitropism control protein (PIN2) gene, complete cds
9941	22589	35793	1.88	2.0E-01	AF089007.1	NT	Arabidopsis thaliana root gravitropism control protein (PIN2) gene, complete cds
10067	22715	35933	0.68	2.0E-01	AF157814.1	NT	Homo sapiens cAMP specific phosphodiesterase (PDE4C) gene, exons 2 through 12
10067	22715	35934	0.68	2.0E-01	AF157814.1	NT	Homo sapiens cAMP specific phosphodiesterase (PDE4C) gene, exons 2 through 12
10114	22762		0.69	2.0E-01	X78388.1	NT	D. melanogaster DNA mobile element (hoppe)
10305	22952	36167	2.78	2.0E-01	X97121.1	NT	R. norvegicus mRNA for NTR2 receptor
10744	23431	36674	1.56	2.0E-01	D89088.1	NT	Salvelinus pluvius mRNA for transferrin, complete cds
10744	23431	36675	1.56	2.0E-01	D89088.1	NT	Salvelinus pluvius mRNA for transferrin, complete cds
11608	24207	37530	1.4	2.0E-01		NT	Chlorella vulgaris chloroplast, complete genome
11609	24207	37531	1.4	2.0E-01	7524759	NT	Chlorella vulgaris chloroplast, complete genome
12358	24782		1.51	2.0E-01	AF206837.2	NT	Plumbeolae promelas liver glucose-6-phosphate-1-dehydrogenase mRNA, partial cds
12545	25210		1.39	2.0E-01	AF302773.1	NT	Homo sapiens rhinein-Lm isoform (rhinein) mRNA, complete cds
12556	25139	30894	1.36	2.0E-01	AW975297.1	EST_HUMAN	EST387405 MAGE resequences, MAGN Homo sapiens cDNA
12594	24950	30985	3.58	2.0E-01	AI023592.1	EST_HUMAN	ov60a10.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1843610.3
12618	24824		2.68	2.0E-01	AF076104.2	NT	Homo sapiens Ku70-binding protein (KUB3) mRNA, partial cds
12753	25014	30978	1.87	2.0E-01	11528495	NT	Mus musculus fructosebismine 3 kinase (Fb3k), mRNA
108	12929		3.0	1.9E-01	7549743	NT	Rattus norvegicus Aryl hydrocarbon receptor nuclear translocator 1 (Ahr1), mRNA
342	13143	25781	6.86	1.9E-01	AF004353.1	NT	Mus musculus pale ear (ep) gene, wild type allele, 3' region, partial cds
641	13420	26058	1.43	1.9E-01	U32581.2	NT	Homo sapiens lamda101a protein kinase C-interacting protein mRNA, complete cds
641	13420	26059	1.43	1.9E-01	U32581.2	NT	Homo sapiens lamda101a protein kinase C-interacting protein mRNA, complete cds

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
648	13427	28066	5.97	1.9E-01	BE070801.1	EST_HUMAN	RC3-BT0502-251198-011-d01 BT0502 Homo sapiens cDNA
649	13427	28066	8.40	1.9E-01	BE070801.1	EST_HUMAN	RC3-BT0502-251198-011-d01 BT0502 Homo sapiens cDNA
665	13730		1.73	1.9E-01	7305180	NT	Mus musculus interleukin 2 receptor, gamma chain (IL2rg), mRNA
1082	13840	28499	13.43	1.9E-01	AA358813.1	EST_HUMAN	EST18784 Fetal lung II Homo sapiens cDNA 5' end
1349	14097	20772	1.70	1.9E-01	AF061282.1	NT	Sorghum bicolor 22 kDa kafirin cluster
1414	14162		2.51	1.9E-01	AF184623.1	NT	Plasmodium vivax reticulocyte binding protein-2 (rbp-2) gene, complete cds
2380	15102	27841	3.61	1.9E-01	8822533	NT	Homo sapiens hypothetical protein FLJ10681 (FLJ10681), mRNA
2923	15688	28333	3.43	1.9E-01	U06006.1	NT	Sigmund hispidus p53 gene, partial cds
2939	15704		5.68	1.9E-01	U00922.1	NT	Gallus gallus ovalbumin (Y) gene, complete cds
3002	15768	28417	0.96	1.9E-01	U25148.1	NT	Rattus norvegicus brush border myosin-I (BBMI) mRNA, partial cds
3380	16148	28803	4.28	1.9E-01	D13187.1	NT	Mouse gene for immunoglobulin diversity region D1
3473	16228	28883	4.44	1.9E-01	R16467.1	EST_HUMAN	Y4210.1 Scores fetal liver spleen 1NFSL Homo sapiens cDNA clone IMAGE:129547 5'
3818	18668	29189	1.33	1.9E-01	P36788	SWISSPROT	PAIR-RULE PROTEIN ODD-PAIRED
3873	18722	29358	3.15	1.9E-01	AB006784.1	NT	Schizosaccharomyces pombe DNA for cytoplasmic dynein heavy chain, complete cds
4063	18808	29438	1.28	1.9E-01	AW754106.1	EST_HUMAN	CN3-CT0315-271198-045-11 CT0315 Homo sapiens cDNA
4206	18947	29573	1.09	1.9E-01	BE834943.1	EST_HUMAN	MR1-FN0010-290700-007-d04 FN0010 Homo sapiens cDNA
4950	17877		1.05	1.9E-01	AF223642.1	NT	Rattus norvegicus chemokine receptor CXCR3 mRNA, complete cds
5517	18315		4.88	1.9E-01	AW130149.1	EST_HUMAN	Xf29a07.x1 NCL CGAP_UH1 Homo sapiens cDNA clone IMAGE:2618444 3' similar to gb:M73779 RETINOIC ACID RECEPTOR ALPHA-1 (HUMAN);
5558	18355	31285	7.87	1.9E-01	AF127937.1	NT	Homo sapiens DNA polymerase epsilon catalytic subunit protein (POLE1) gene, exon 1a
5749	18541	31463	0.7	1.9E-01	AF091216.1	NT	Mus musculus Wm protein (Wm) gene, complete cds
5795	18586		2.56	1.9E-01	AU133116	EST_HUMAN	AU133116 NT2RP4 Homo sapiens cDNA clone NT2RP4001328 5'
6235	19009	31985	0.75	1.9E-01	AI762391.1	EST_HUMAN	w154h02.x1 NCL CGAP_Co18 Homo sapiens cDNA clone IMAGE:2394089 3'
6294	19067	32050	1.03	1.9E-01	AW148452.1	EST_HUMAN	Xf14c08.x1 NCL CGAP_K048 Homo sapiens cDNA clone IMAGE:2618030 3' similar to gb:X033559 ATP SYNTHASE BETA CHAIN, MITOCHONDRIAL PRECURSOR (HUMAN);
6676	17952	30548	1.69	1.9E-01	R43212.1	EST_HUMAN	yg09a12.s1 Scores infant brain 1NIB Homo sapiens cDNA clone IMAGE:31663 3' similar to contains MER13 repetitive element;
6800	19638	32682	0.89	1.9E-01	AF034920.1	NT	Homo sapiens tubby like protein 1 (TULP1) gene, exons 9-11
6900	19638	32683	0.89	1.9E-01	AF034920.1	NT	Homo sapiens tubby like protein 1 (TULP1) gene, exons 9-11
7160	19847	32817	0.62	1.9E-01	U73846.1	NT	Drosophila melanogaster testis-specific RNA-binding protein (bruno) mRNA, complete cds
7391	20070	33149	1.38	1.9E-01	U80922.1	NT	Arabidopsis thaliana serine/threonine protein phosphatase type one (TOPP8) gene, complete cds
7438	20113	33201	3.11	1.9E-01	AF072724.1	NT	Zea mays starch branching enzyme 1 (sbe1) gene, complete cds
7885	20590	33709	1.46	1.9E-01	AL161557.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 57
8586	21278	34417	10.77	1.9E-01	AB033024.1	NT	Homo sapiens mRNA for KIAA1198 protein, partial cds

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Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLASTE Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8844	21636	34881	1.24	1.9E-01	M14588.1	NT	Musupial cat beta-globin gene mRNA, partial cds
8844	21536	34882	1.24	1.9E-01	M14588.1	NT	Musupial cat beta-globin gene mRNA, partial cds
9775	22426	35632	0.61	1.9E-01	AA912488.1	EST_HUMAN	008g10.s1 NCL_CGAP_PNS1 Homo sapiens cDNA clone IMAGE:1537508 3' similar to contains Alu repetitive element;
10142	22790	36005	0.66	1.9E-01	BE630353.1	EST_HUMAN	RC5-ET0082-060700-022-A02 ET0082 Homo sapiens cDNA
10142	22790	36006	0.85	1.9E-01	BE630353.1	EST_HUMAN	RC5-ET0082-060700-022-A02 ET0082 Homo sapiens cDNA
10540	23237	36470	2.48	1.9E-01	AL161503.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 15
10540	23237	36471	2.48	1.9E-01	AL161503.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 15
10655	23346	36583	2.09	1.9E-01	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
10986	23691	36915	1.34	1.9E-01	AA912480.1	EST_HUMAN	06602.s1 NCL_CGAP_PNS1 Homo sapiens cDNA clone IMAGE:1537467 3' similar to gb.L21698_cds1 PROTHYMOSIN ALPHA (HUMAN); contains element OFR repetitive element;
10986	23691	36916	1.34	1.9E-01	AA912480.1	EST_HUMAN	06602.s1 NCL_CGAP_PNS1 Homo sapiens cDNA clone IMAGE:1537467 3' similar to gb.L21698_cds1 PROTHYMOSIN ALPHA (HUMAN); contains element OFR repetitive element;
11487	24098	37399	1.53	1.9E-01	M22283.1	NT	Rattus norvegicus sodium channel 1 mRNA, complete cds
11728	24320	37845	2.77	1.9E-01	AJ243213.1	NT	Homo sapiens partial 5-HT4 receptor gene, exons 2 to 5
11752	24343	37873	1.8	1.9E-01	L07344.1	NT	Influenza A/Guangdong/243/72 nucleoprotein (seg 5) gene, 5' end
11847	24431	37772	1.3	1.9E-01	AF287263.1	NT	Mus musculus ATP-binding cassette 1, sub-family A, member 1 (Abca1) gene, complete cds
12399	24785		1.67	1.9E-01	AF059000.1	NT	Drosophila melanogaster clathrin light chain mRNA, complete cds
30	12858	25476	2.61	1.9E-01	U73200.1	NT	Mus musculus p116Rip mRNA, complete cds
253	15539	25700	0.9	1.9E-01	AB022090.1	NT	Mus musculus Cdc gene for chaperonin containing TCP-1 gamma subunit, partial cds
361	13158	25802	1.76	1.9E-01	4502632	NT	Homo sapiens calcium channel, voltage-dependent, beta 2 subunit (CACNB2) mRNA, and translated products
729	13503	26158	1.01	1.9E-01	AB021460.2	NT	Oryzias latipes gene for membrane guanylyl cyclase OIGC1, complete cds
961	13726	26390	0.94	1.9E-01	AB012212.1	EST_HUMAN	wd7182.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:2337061 3'
1069	13826	26485	1.63	1.9E-01	AF000590.1	NT	Dictyostellum discoideum plasmid Ddp5, complete genome
1266	14016	26883	6.26	1.9E-01	AL117189.1	NT	Yersinia pestis plasmid pCD1
1492	14239	26825	1.97	1.9E-01	6753947	NT	Mus musculus guanylate nucleotide binding protein 1 (Gbp1), mRNA
1492	14239	26826	1.97	1.9E-01	6753947	NT	Mus musculus guanylate nucleotide binding protein 1 (Gbp1), mRNA
1839	14577		1.2	1.9E-01	4505036	NT	Homo sapiens latent transforming growth factor beta binding protein 4 (LTBP4) mRNA
1859	14697		1.58	1.9E-01	AF733708.1	EST_HUMAN	qg22d10.x5 NCL_CGAP_KG3 Homo sapiens cDNA clone IMAGE:1761811 3' similar to TR-O75036 075036 GAMMA BUTYROBETANE HYDROXYLASE;

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1908	14845	27355	1.75	1.8E-01	AB051897.1	NT	Mus musculus Scyl6, Scyl6, Scyl6-ps, Scyl6-5 genes for small inducible cyclidine A6 precursor, small inducible cyclidine A9 precursor, Scyl6 pseudogene, small inducible cyclidine A5 precursor, complete cds
2697	15406		2.36	1.8E-01	AW635728.1	EST_HUMAN	QV3-DT0018-081289-036-g04 DT0018 Homo sapiens cDNA
2698	15605		1.89	1.8E-01	AF184589.1	NT	Jonopsidium acule LEAFY protein (LEAFY2) gene, partial cds
2804	15670	28319	1.29	1.8E-01	AW182300.1	EST_HUMAN	X41a03.x1 Soares_NFL_T_G8C_S1 Homo sapiens cDNA clone IMAGE:2850750 3'
3121	15888	28528	1.76	1.8E-01	AW695178.1	EST_HUMAN	QV0-BN0041-070300-147-g04 BN0041 Homo sapiens cDNA
3610	16363	29005	0.88	1.8E-01	H033399.1	EST_HUMAN	Y45601.s1 Soares placenta Nb2-HP Homo sapiens cDNA clone IMAGE:151704 3' similar to contains Alu repetitive element
3610	16363	29008	0.88	1.8E-01	H033399.1	EST_HUMAN	Y45601.s1 Soares placenta Nb2-HP Homo sapiens cDNA clone IMAGE:151704 3' similar to contains Alu repetitive element
4288	17038		1.43	1.8E-01	D37954.1	NT	Bovine NB25 mRNA for MHC class II (B2A-DQB), complete cds
4519	17254	29888	5.94	1.8E-01	AL161556.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 56
4721	17453	30087	2.0	1.8E-01	AB051897.1	NT	Mus musculus Scyl6, Scyl6, Scyl6-ps, Scyl6-5 genes for small inducible cyclidine A6 precursor, small inducible cyclidine A9 precursor, Scyl6 pseudogene, small inducible cyclidine A5 precursor, complete cds
4754	17498	30114	0.94	1.8E-01	X82179.1	NT	S.tuberosum mRNA for alcohol dehydrogenase
4984	17707	30311	2.03	1.8E-01	AW814270.1	EST_HUMAN	MF3-ST0203-151289-112-g08 ST0203 Homo sapiens cDNA
4999	17722	30325	1.06	1.8E-01	AI792382.1	EST_HUMAN	an2807.y6 Gessler Wilms tumor Homo sapiens cDNA clone IMAGE:1700028 5'
5036	17754	30367	4.66	1.8E-01	AF181258.1	NT	Mesocricetus auratus Na-taurocholate cotransporting polypeptide mRNA, partial cds
5718	18510	31431	0.82	1.8E-01	AL161594.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 90
5835	18824	31558	0.68	1.8E-01	N28829.1	EST_HUMAN	Y338h08.r1 Soares melanocyte 2Nbl-HM Homo sapiens cDNA clone IMAGE:264083 5'
6037	18817	31777	1.18	1.8E-01	6678428	NT	Mus musculus Trif receptor-associated factor 6 (Trif6), mRNA
6037	18817	31778	1.18	1.8E-01	6678428	NT	Mus musculus Trif receptor-associated factor 6 (Trif6), mRNA
6419	19187	32185	1.15	1.8E-01	Q9QY14	SWISSPROT	FORKHEAD BOX PROTEIN E3
6463	19230		2.06	1.8E-01	IN94853.1	EST_HUMAN	Y62h02.r1 Soares_multiple_sclerosis_2NblHSP Homo sapiens cDNA clone IMAGE:278163 5'
6906	19944	32689	1.18	1.8E-01	AB018551.1	NT	Citullus lanatus mRNA for wus, complete cds
6906	19944	32690	1.18	1.8E-01	AB018551.1	NT	Citullus lanatus mRNA for wus, complete cds
7346	20027	33103	0.7	1.8E-01	AP001511.1	NT	Bacillus halodurans genomic DNA, section 5/14
9242	21921	35091	1.23	1.8E-01	MT3258.1	NT	Human cellular DNA/Human papillomavirus proviral DNA
9274	22028	35198	1.22	1.8E-01	9628232	NT	Bacteriophage Ika, complete genome
9391	22053		0.5	1.8E-01	AA493751.1	EST_HUMAN	h02a05.s1 NCI_CGAP_Thy1 Homo sapiens cDNA clone IMAGE:943088 similar to contains L1.13 L1 repetitive element
9473	22126	35305	0.94	1.8E-01	IP15272	SWISSPROT	AMP NUCLEOSIDASE

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9473	22126	35306	0.94	1.8E-01	P15272	SWISSPROT	AMP NUCLEOSIDASE
9514	22167	35348	0.91	1.8E-01	M26019.1	NT	S.commune oridine-5'-phosphate decarboxylase (URA1) gene, complete cds
9514	22167	35349	0.91	1.8E-01	M26019.1	NT	S.commune oridine-5'-phosphate decarboxylase (URA1) gene, complete cds
9679	22331	35528	0.75	1.8E-01	P08123	SWISSPROT	COLLAGEN ALPHA 2(I) CHAIN PRECURSOR
9683	22335	35530	0.77	1.8E-01	U67548.1	NT	Methanococcus jannaschii section 80 of 150 of the complete genome
10033	22881		0.78	1.8E-01	AF200282.1	NT	Aquarius ampelus cytochrome oxidase subunit I (COI) gene, partial cds; mitochondrial gene for mitochondrial product
10286	22914	36124	1.48	1.8E-01	X63440.1	NT	M.musculus mRNA for P19-protein tyrosine phosphatase
10533	23230	36465	3.08	1.8E-01	X77336.1	NT	A.thaliana mRNA for ribonucleotide reductase R2
10577	23272	36508	7.28	1.8E-01	U38808.1	NT	Bacteriophage r11 integrase, repressor protein (rrp), dUTPase, holin and lysin genes, complete cds
10637	19644	32689	2.61	1.8E-01	AB018561.1	NT	Citritulus lanatus mRNA for wus, complete cds
10637	19644	32690	2.61	1.8E-01	AB018561.1	NT	Citritulus lanatus mRNA for wus, complete cds
10638	23329	36587	5.89	1.8E-01	AF019107.1	NT	Dicotyledonum discoidium unknown (DG1041) gene, complete cds
10942	23621	36870	2.64	1.8E-01	M59257.1	NT	Human carcinoembryonic antigen (CEA) gene, exon 4
11439	23206	36438	4.04	1.8E-01	X57033.1	NT	B.taurus mRNA for potassium channel
11767	24358	37691	3.45	1.8E-01	8394421	NT	Rattus norvegicus Thrombosane receptor (Tbox2), mRNA
11967	24514		1.89	1.8E-01	10086561	NT	Bovine ephemeral fever virus, complete genome
12026	24553	31111	2.04	1.8E-01	BF348823.1	EST_HUMAN	802019928F1 NC1 CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4155318 5'
12478	24839		3.28	1.8E-01	Q96882	SWISSPROT	DNA TERMINAL PROTEIN (BELLETT PROTEIN) (PTP PROTEIN)
12585	24908		1.91	1.8E-01	R24494.1	EST_HUMAN	y48h10.1 Soares placenta Nb2-FP Homo sapiens cDNA clone IMAGE:133027 5'
12628	24931		2.3	1.8E-01	Y11114.1	NT	E.dispar mRNA for hexokinase (hck1)
12746	25324		1.61	1.8E-01	X19635.1	NT	Rattus norvegicus CaBP9k gene
503	13345	25972	1.57	1.7E-01	BE385194.1	EST_HUMAN	801274604F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3615788 5'
787	13559	26221	2.32	1.7E-01	X53330.1	NT	P.dumetilli histone gene cluster for core histones H2A, H2B, H3 and H4
941	13708		2.21	1.7E-01	P35516	SWISSPROT	NEUROFILAMENT TRIPLET L PROTEIN (NEUROFILAMENT LIGHT POLYPEPTIDE) (NFL)
1036	13796	26455	1.89	1.7E-01	AF061810.1	NT	Lymantia dispar nucleopolydnavirus, complete genome
1036	13796	26456	1.89	1.7E-01	AF061810.1	NT	Lymantia dispar nucleopolydnavirus, complete genome
1974	14710		2.6	1.7E-01	AF255051.1	NT	Homo sapiens BNI(P3H) (BNI(P3H)) gene, complete cds; nuclear gene for mitochondrial product
2863	15631	28275	2.29	1.7E-01	AF000716.1	NT	Vibrio cholerae hypoxanthine phosphoribosyltransferase (hpt) gene, partial cds, hemagglutinin/protease regulatory protein (hepR) gene, complete cds, and YRAL VIBCO gene, partial cds



Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2863	15631	28276	2.29	1.7E-01	AF000716.1	NT	Vibrio cholerae hypoxanthine phosphoribosyltransferase (hpt) gene, partial cds, hemagglutinin/protease regulatory protein (hptR) gene, complete cds, and YRAL VIBCO gene, partial cds
2927	15683	28338	1.55	1.7E-01	AA336909.1	EST_HUMAN	EST41651 Endometrial tumor Homo sapiens cDNA 5' end
2985	15761	28409	1.33	1.7E-01	AJ238736.1	NT	Naja naja atra cbc-1 gene, exons 1-3
2995	15761	28410	1.33	1.7E-01	AJ238736.1	NT	Naja naja atra cbc-1 gene, exons 1-3
3103	15868	28508	1.24	1.7E-01	AF081514.1	NT	Taous carnensis geranylgeranyl diphosphate synthase mRNA, complete cds
3439	16195	28845	1.74	1.7E-01	AJ269505.1	NT	Anabaena sp. ORF4 (partial), ORF3, ORF2, ORF1, adpA gene, adpB gene, adpC gene, adpD gene, adpE gene and adpF gene
3595	16348	28988	1.04	1.7E-01	AJ224877.1	NT	Homo sapiens hap1 gene, complete CDS
3616	16389		0.82	1.7E-01	5031888	NT	Homo sapiens LIM domain-containing preferred translocation partner in lipoma (LPP) mRNA
3918	16688	29306	4.84	1.7E-01	AJ235377.1	NT	Homo sapiens derivative 11 breakpoint fragment: partial intron 10 of the ALL-1/MLL/HRX gene fused to intron 5 of the AF-4/FEL gene
4522	17257		1.09	1.7E-01	X52836.1	NT	Schistosoma gregaria alpha repetitive DNA
4787	17518	30140	1.08	1.7E-01	AJ247635.1	EST_HUMAN	qf57d09.x1 Soares_fetal_liver_spleen_INFLS_S1 Homo sapiens cDNA clone IMAGE:1848808 3' similar to contains ORF.b1 ORF repetitive element;
5054	17773		1.11	1.7E-01	AF072725.1	NT	Zea mays starch branching enzyme IIb (ae) gene, complete cds
5122	17840	30455	0.75	1.7E-01	D37951.1	NT	Rattus norvegicus mRNA for MIBP1 (c-myc intron binding protein 1), complete cds
5323	18128	30785	2	1.7E-01	AA470886.1	EST_HUMAN	he13a02.s1 NCL CGAP_Oo3 Homo sapiens cDNA clone IMAGE:881088 3' similar to gb:M17886 80S ACIDIC RIBOSOMAL PROTEIN P1 (HUMAN);
5323	18128	30786	2	1.7E-01	AA470886.1	EST_HUMAN	he13a02.s1 NCL CGAP_Oo3 Homo sapiens cDNA clone IMAGE:881088 3' similar to gb:M17886 80S ACIDIC RIBOSOMAL PROTEIN P1 (HUMAN);
5506	18304	31206	0.62	1.7E-01	U43598.1	NT	Brugia pahangi microfilarial sheath protein SHP3 (shp3) gene, complete cds
6237	19011	31986	13.23	1.7E-01	H72118.1	EST_HUMAN	ys02g08.s1 Soares_fetal_liver_spleen_INFLS Homo sapiens cDNA clone IMAGE:213658 3'
6283	19066	32048	0.97	1.7E-01	AJ370976.1	EST_HUMAN	ta29c11.x1 Soares_fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:213658 3'
6283	19066	32049	0.97	1.7E-01	AJ370976.1	EST_HUMAN	ta29c11.x1 Soares_fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:2045492 3'
6753	17922	30557	0.65	1.7E-01	BE300286.1	EST_HUMAN	60094406771 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:2860248 3'
6780	19524		2.28	1.7E-01	AF028652.3	NT	Mesocricetus auratus oviductin precursor (OV) gene, complete cds
6902	19640		0.88	1.7E-01	Z29210.1	NT	Homo sapiens HFE gene
7120	19808	32874	1.1	1.7E-01	AP000422.1	NT	Escherichia coli O157:H7 genomic DNA, Sakai-VT2 prophage inserted region
7197	19883	32957	8.8	1.7E-01	BE734179.1	EST_HUMAN	601569022F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3843964 6'
7380	20060	33139	1.37	1.7E-01	P16724	SWISSPROT	PROBABLE PROCESSING AND TRANSPORT PROTEIN UL58 (HFLF0 PROTEIN)
7386	25112	33153	0.71	1.7E-01	Q01955	SWISSPROT	COLLAGEN ALPHA 3(V) CHAIN PRECURSOR
7760	20456	33590	1.32	1.7E-01	AF000573.1	NT	Homo sapiens homogentisate 1,2-dioxygenase gene, complete cds

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7863	20558	33684	0.62	1.7E-01	AF150889.1	NT	Pseudomonas putida long-chain-fatty-acid-CoA ligase (fadD) gene, complete cds
8175	20889	34001	6.19	1.7E-01	7706428	NT	Homo sapiens cleavage and polyadenylation specificity factor 3, 73kD subunit (CPSF3), mRNA
8175	20889	34002	6.19	1.7E-01	7706428	NT	Homo sapiens cleavage and polyadenylation specificity factor 3, 73kD subunit (CPSF3), mRNA
8598	21280	34431	0.47	1.7E-01	AW982873.1	EST_HUMAN	RC2-BN0032-120200-011-410 BN0032 Homo sapiens cDNA
8628	21320	34462	2.09	1.7E-01	D00384.1	EST	Rat (SHR strain) SX1 gene
8743	21435	34580	0.75	1.7E-01	AF217413.1	NT	Homo sapiens neurotrophin 3 isoform gene, complete cds, alternatively spliced
8743	21435	34581	0.75	1.7E-01	AF217413.1	NT	Homo sapiens neurotrophin 3 isoform gene, complete cds, alternatively spliced
9068	21755	34816	0.48	1.7E-01	BE253142.1	EST_HUMAN	601116872F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3357184 5'
9068	21755	34917	0.48	1.7E-01	BE253142.1	EST_HUMAN	601116872F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3357184 5'
9490	22143	35323	7.85	1.7E-01	AP001508.1	NT	Bacillus halodurans genomic DNA, section 2/14
9597	22250	35435	0.51	1.7E-01	AW977455.1	EST_HUMAN	EST389584 MAGE cDNAs, MAGO Homo sapiens cDNA
9597	22250	35436	0.51	1.7E-01	AW977455.1	EST_HUMAN	EST389584 MAGE cDNAs, MAGO Homo sapiens cDNA
9815	22268	35455	3.14	1.7E-01	U16288.1	NT	Human class IV alcohol dehydrogenase (ADH7) gene, exon 3
9708	22358	35555	0.63	1.7E-01	AJ251749.1	NT	Drosophila melanogaster mRNA for serine protease inhibitor (serpin-6), (sp6 gene)
10133	22781		2.4	1.7E-01	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
10283	22940	36154	1.4	1.7E-01	11427203	NT	Homo sapiens solute carrier family 7 (cationic amino acid transporter, y <sup>+</sup> system), member 2 (SLC7A2), mRNA
10285	22942	36156	1.72	1.7E-01	AA827872.1	EST_HUMAN	h460e07.s1 NCI_CGAP_C09 Homo sapiens cDNA clone IMAGE:1148282 3' similar to gb:L25081
10501	23147		0.45	1.7E-01	AL181542.2	NT	TRANSFORMING PROTEIN RHOC (HUMAN); Arabidopsis thaliana DNA chromosome 4, contig fragment No. 42
10579	23274	36511	8.78	1.7E-01	BE390835.1	EST_HUMAN	601288547F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3613258 5'
10709	23368	36637	2.65	1.7E-01	AA814817.1	EST_HUMAN	af43a03.s1 NCI_CGAP_CNS1 Homo sapiens cDNA clone IMAGE:1426924 3'
11055	23725	36995	9.13	1.7E-01	7106300	NT	Mus musculus adenomatous polyposis coli binding protein Ebt1 (Ebt1), mRNA
11065	23725	36996	9.13	1.7E-01	7106300	NT	Mus musculus adenomatous polyposis coli binding protein Ebt1 (Ebt1), mRNA
11148	23813	37098	1.62	1.7E-01	Y08391.1	NT	S.pombe pap1+ gene
11348	24038	37341	1.69	1.7E-01	AA883375.1	EST_HUMAN	af4509.s1 Score_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1460297 3'
11712	24307		1.83	1.7E-01	P15272	SWISSPROT	AMP NUQEQUIDASE
11746	24337	37683	1.62	1.7E-01	P55899	SWISSPROT	IGG RECEPTOR FCRN LARGE SUBUNIT P51 PRECURSOR (FCRN) (NEONATAL FC RECEPTOR) (IGG FC FRAGMENT RECEPTOR TRANSPORTER, ALPHA CHAIN)
11746	24337	37684	1.62	1.7E-01	P55899	SWISSPROT	IGG RECEPTOR FCRN LARGE SUBUNIT P51 PRECURSOR (FCRN) (NEONATAL FC RECEPTOR) (IGG FC FRAGMENT RECEPTOR TRANSPORTER, ALPHA CHAIN)
11874	24453	37789	2.62	1.7E-01	11418157	NT	Homo sapiens calcium channel, voltage-dependent, alpha 1I subunit (CACNA1I), mRNA
12000	25320		1.95	1.7E-01	AL163278.2	NT	Homo sapiens chromosome 21 segment HS21C078

Table 4

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12268	25167		1.05	1.7E-01	A1824404.1	EST_HUMAN	t689g05.x1 NCL CGAP_U1 Homo sapiens cDNA clone IMAGE:2274872 3' similar to gb:M73779 RETINOIC ACID RECEPTOR ALPHA-1 (HUMAN);
12552	24889	30998	18.27	1.7E-01	U01317.1	NT	Human beta globin region on chromosome 11
122	12940	25582	2.38	1.6E-01	AF217532.1	NT	Homo sapiens mevalonate kinase gene, exon 8 and 7
964	15518	26081	1.51	1.6E-01	R31497.1	EST_HUMAN	Y178712.1 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:135598 5'
1493	14240	26927	1.16	1.6E-01	AAS48983.1	EST_HUMAN	nk28d12.s1 NCL CGAP_Cot11 Homo sapiens cDNA clone IMAGE:1014839 3'
1512	14288	26944	3.92	1.6E-01	AF298117.1	NT	Homo sapiens homeobox protein OTX2 gene, complete cds
1917	14654	27364	1.86	1.6E-01	P22063	SWISSPROT	AXONIN-1 PRECURSOR (AXONAL GLYCOPROTEIN TAG-1)
1977	14713		1.51	1.6E-01	U10334.1	NT	Crassostrea gigas RNA polymerase II largest subunit mRNA, partial cds
2383	15583	27844	1.36	1.6E-01	X94232.1	NT	H. sapiens mRNA for novel T-cell activation protein
2497	15214	27957	1.4	1.6E-01	AB037729.1	NT	Homo sapiens mRNA for KIAA1308 protein, partial cds
2894	15661	28307	10.17	1.6E-01	AF185589.1	NT	Homo sapiens cytochrome P450 3A4 (CYP3A4) gene, promoter region
2894	15661	28308	10.17	1.6E-01	AF185589.1	NT	Homo sapiens cytochrome P450 3A4 (CYP3A4) gene, promoter region
3824	16377	29018	1.21	1.6E-01	AJ003165.1	NT	Populus trichocarpa cv. Trichobel ABI3 gene
3824	16377	29019	1.21	1.6E-01	AJ003165.1	NT	Populus trichocarpa cv. Trichobel ABI3 gene
3982	16730		2.49	1.6E-01	AE004413.1	NT	Vibrio cholerae chromosome II, section 70 of 93 of the complete chromosome
4284	17033	29661	9.42	1.6E-01	AF179880.1	NT	Homo sapiens apelin gene, complete cds
4423	17159		3.07	1.6E-01	AW968801.1	EST_HUMAN	EST380677 IMAGE sequences, MAGU Homo sapiens cDNA
4431	17187		4.35	1.6E-01	8753319	NT	Mus musculus chaperonin subunit 3 (gamma) (Cct3), mRNA
4898	17586	30219	0.7	1.6E-01	P40631	SWISSPROT	MICRONUCLEAR LINKER HISTONE POLYPROTEIN (MIC LH) [CONTAINS: LINKER HISTONE PROTEINS ALPHA, BETA, DELTA AND GAMMA]
4892	17619	30237	1.38	1.6E-01	AA088343.1	EST_HUMAN	284409.s1 Stratagene colon (8037204) Homo sapiens cDNA clone IMAGE:511361 3' similar to TR:E221955
4911	17639	30253	1.54	1.6E-01	AJ006356.1	NT	E221955 38,855 BP SEGMENT OF CHROMOSOME XIV.;
4911	17639	30254	1.54	1.6E-01	AJ006356.1	NT	Lycopodium obscurum Rael fragment 2, satellite region
6303	18108	30768	0.99	1.6E-01	L40608.1	NT	Lycopodium obscurum Rael fragment 2, satellite region
5435	18234	30947	2.95	1.6E-01	AW197496.1	EST_HUMAN	Plasmodium falciparum (strain Dd2) variant-specific surface protein (var-1) gene, complete cds
5435	18234	30948	2.95	1.6E-01	AW197496.1	EST_HUMAN	xm431071.x1 NCL CGAP_GC6 Homo sapiens cDNA clone IMAGE:2686969 3' similar to TR:O75984 O75984
5447	18246	31134	2.15	1.6E-01	AF034716.1	NT	HYPOTHETICAL 127.6 KD PROTEIN;
5938	18720	31679	0.83	1.6E-01	BE025803.1	EST_HUMAN	xm431071.x1 NCL CGAP_GC6 Homo sapiens cDNA clone IMAGE:2686969 3' similar to TR:O75984 O75984
6162	18939	31909	0.71	1.6E-01	BF183584.1	EST_HUMAN	HYPOTHETICAL 127.6 KD PROTEIN;
6162	18939	31910	0.71	1.6E-01	BF183584.1	EST_HUMAN	xm431071.x1 NCL CGAP_GC6 Homo sapiens cDNA clone IMAGE:2686969 3' similar to TR:O75984 O75984
							HYPOTHETICAL 127.6 KD PROTEIN;
							Rattus norvegicus CCAAT/enhancer binding protein epsilon (cebp) gene, complete cds
							RC3-BN0034-310800-113-101 BN0034 Homo sapiens cDNA
							601809725R1 NIH_MGC_18 Homo sapiens cDNA clone IMAGE:4040335 3'
							601809725R1 NIH_MGC_18 Homo sapiens cDNA clone IMAGE:4040335 3'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6334	19104	32092	2.37	1.6E-01	AL161588.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 84
6334	19104	32093	2.37	1.6E-01	AL161588.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 84
6885	19802	32841	0.55	1.6E-01	AA398047.1	EST_HUMAN	288d04.1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:729511 5'
6887	17944	30639	5.32	1.6E-01	AW291215.1	EST_HUMAN	U1-H-B12-egl-b-06-0-U1.s1 NCI CGAP_Sub4 Homo sapiens cDNA clone IMAGE:2724418 3'
7676	20340	33453	1.66	1.6E-01	AW246350.1	EST_HUMAN	2822248.5prime NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2822248 5'
7703	20366		0.74	1.6E-01	AU136525.1	EST_HUMAN	AU136525 PLACE1 Homo sapiens cDNA clone PLACE1004468 5'
7768	20484	33589	1.81	1.6E-01	L49349.1	NT	Gorilla gorilla estrogen receptor gene, partial exon
7924	20619		0.51	1.6E-01	BE244087.1	EST_HUMAN	TCBAP1E0007 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP0607
8018	20713	33844	0.87	1.6E-01	U38243.1	NT	Bacteroides vulgatus beta-lactamase (cblA) gene, complete cds and mobilization protein (mobA) gene, complete cds
8530	21222	34364	0.88	1.6E-01	Z98119.1	NT	Bacillus subtilis complete genome (section 16 of 21): from 2897771 to 3213410
8725	21417	34581	0.63	1.6E-01	R13673.1	EST_HUMAN	yf8h08.r1 Soares Infant brain 1NIB Homo sapiens cDNA clone IMAGE:28873 5'
8831	21523		0.59	1.6E-01	L36861.1	NT	Homo sapiens guanylate cyclase activating protein (GCAP) gene exons 1-4, complete cds
8870	21561	34706	1.72	1.6E-01	Z49501.1	NT	S.cerevisiae chromosome X reading frame ORF YJRO01w
9009	21669		0.83	1.6E-01	AF111167.2	NT	Homo sapiens Jun dimerization protein gene, partial cds; cfos gene, complete cds; and unknown gene
9551	22204		2.09	1.6E-01	BF375171.1	EST_HUMAN	RC3-ST0200-041199-011-h01 ST0200 Homo sapiens cDNA
9554	22207	35391	1.7	1.6E-01	Z49501.1	NT	S.cerevisiae chromosome X reading frame ORF YJRO01w
9589	22242		0.97	1.6E-01	BE155984.1	EST_HUMAN	PM2-HT0383-270100-004-f11 HT0383 Homo sapiens cDNA
10553	23249	36488	3.3	1.6E-01	AW850853.1	EST_HUMAN	IL3-CT0220-111199-028-G01 CT0220 Homo sapiens cDNA
10918	23598	36845	1.59	1.6E-01	O14647	SWISSPROT	CHROMODOMAIN-HELICASE-DNA-BINDING PROTEIN 2 (CHD-2)
10918	23598	36846	1.59	1.6E-01	O14647	SWISSPROT	CHROMODOMAIN-HELICASE-DNA-BINDING PROTEIN 2 (CHD-2)
10923	23603	36852	1.55	1.6E-01	BE259049.1	EST_HUMAN	601145783F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3161183 5'
11059	23728		4.28	1.6E-01	AF108064.1	NT	Plasmodium falciparum calcium-dependent protein kinase-3 (cdpk3) gene, complete cds
11388	23994	37298	7.28	1.6E-01	6871562	NT	Mus musculus adaptor-related protein complex AP-1, beta 1 subunit (Ap1b1), mRNA
11706	24301		1.26	1.6E-01	BF527237.1	EST_HUMAN	602039485F2 NCI CGAP_Bim67 Homo sapiens cDNA clone IMAGE:4177073 5'
11888	25331		1.84	1.6E-01	6879468	NT	Mus musculus protein kinase, cGMP-dependent, type II (Prkg2), mRNA
12002	24538	37273	5.28	1.6E-01	AV719585.1	EST_HUMAN	AV719585 GLC Homo sapiens cDNA clone GLCEMF07 5'
12292	24721	31052	1.72	1.6E-01	L14633.1	NT	Rat convertase PC5 mRNA, 5' end
12321	24740		1.5	1.6E-01	AW839711.1	EST_HUMAN	RC1-LT0074-120200-014-h01_1 LT0074 Homo sapiens cDNA
12418	26149		287.78	1.6E-01	AB046310.1	NT	Cucumis sativus KS mRNA for anti-leucine synthase, complete cds
12574	24901		2.4	1.6E-01	AK024496.1	NT	Homo sapiens mRNA for FLJ00104 protein, partial cds

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12661	24861		1.72	1.0E-01	AF287344.1	NT	Fuchsia hybrid cultivar Qta 94208 ribosomal protein S10 gene, partial cds; nuclear gene for mitochondrial product
12687	24073	30992		1.7	9506522	NT	Rattus norvegicus chondroitin sulfate proteoglycan 6 (neuroglycan C) (Cep65), mRNA
12706	25046		1.52	1.0E-01	BF672688.1	EST_HUMAN	602152004F1 NIH_MGC 81 Homo sapiens cDNA clone IMAGE:4283145 5'
241	13050	25689	1.4	1.0E-01	BE710087.1	EST_HUMAN	IL3-HT0619-040700-197-E05 HT0619 Homo sapiens cDNA
241	13050	25690	1.4	1.0E-01	BE710087.1	EST_HUMAN	IL3-HT0619-040700-197-E06 HT0619 Homo sapiens cDNA
573	15517		9.31	1.0E-01	AV711686.1	EST_HUMAN	AV711686 DCA Homo sapiens cDNA clone DCAADH06 5'
766	13539	26188	1.09	1.0E-01	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
1070	13828	26487	1.01	1.0E-01	AL009735.1	NT	Cyprinus carpio mRNA for EGG522 myosin heavy chain, 3'UTR
1076	13833	26491	2.75	1.0E-01	AL251885.1	NT	Homo sapiens partial SLC22A2 gene for organic cation transporter (OCT2), exon 1
1091	13849		1.42	1.0E-01	L36125.1	NT	Rattus norvegicus insulin-responsive glucose transporter (GLUT4) gene, 5' end
1194	13946	26610	0.82	1.0E-01	AW195516.1	EST_HUMAN	xn30411.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2696085 3'
1252	14001	26668	2.96	1.0E-01	D26535.1	NT	Human gene for dihydropyrimidine succinyltransferase, complete cds (exon 1-15)
1252	14001	26669	2.96	1.0E-01	D26535.1	NT	Human gene for dihydropyrimidine succinyltransferase, complete cds (exon 1-15)
1455	14212	26901	1.88	1.0E-01	AF117340.1	NT	Mus musculus MAP kinase kinase kinase 1 (Mekk1) mRNA, complete cds
1901	14638	27347	1	1.0E-01	AW444451.1	EST_HUMAN	UI-H-B13-ekb-b-09-0-J1 NCI_CGAP_Sub5 Homo sapiens cDNA clone IMAGE:2733641 3'
2716	15423	28162	1.86	1.0E-01	BF685391.1	EST_HUMAN	602083289F1 NIH_MGC 81 Homo sapiens cDNA clone IMAGE:4247537 5'
2814	15680		1.16	1.0E-01	AW572616.1	EST_HUMAN	xw56402.x2 NCI_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2831978 3' similar to gb:X55072_rna1
3048	15914	28459	0.74	1.0E-01	O78687	SWISSPROT	THYROID HORMONE RECEPTOR ALPHA-1 (HUMAN); NADH-UBIQUINONE OXIDOREDUCTASE CHAIN 4
3347	16106	28761	5.06	1.0E-01	AA635049.1	EST_HUMAN	cc88005.x1 NCI_CGAP_G04 Homo sapiens cDNA clone IMAGE:1571337 3' similar to gb:M11433
3361	16120	28777	0.82	1.0E-01	Z23104.1	NT	RETINOL-BINDING PROTEIN I, CELLULAR (HUMAN); L. stagnalis mRNA for G protein-coupled receptor
3361	16120	28778	0.82	1.0E-01	Z23104.1	NT	L. stagnalis mRNA for G protein-coupled receptor
3738	16491	29126	2.11	1.0E-01	U09894.1	NT	Mus musculus ICR/Swiss glycerinaldehyde 3-phosphate dehydrogenase (Gapd-S) gene, complete cds
3752	16504	29140	0.74	1.0E-01	7108358	NT	Homo sapiens pyruvate dehydrogenase kinase, isoenzyme 1 (PDK1), nuclear gene encoding mitochondrial protein, mRNA
3848	16569	29236	2.65	1.0E-01	AW665663.1	EST_HUMAN	h10f06.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2981411 3'
4028	16773	29405	1.1	1.0E-01	AW366659.1	EST_HUMAN	RC2-HT0149-191099-012-c09 HT0149 Homo sapiens cDNA
4161	16901	29530	8.35	1.0E-01	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
4678	17410	30046	1.57	1.0E-01	BF687665.1	EST_HUMAN	602067182F1 NIH_MGC 57 Homo sapiens cDNA clone IMAGE:4066223 5'
4703	15423	28162	1.92	1.0E-01	BF685391.1	EST_HUMAN	602083289F1 NIH_MGC 81 Homo sapiens cDNA clone IMAGE:4247537 5'
5132	17850	30467	1.56	1.0E-01	Z72603.1	NT	S. cerevisiae chromosome VII reading frame ORF YGL086w

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5145	17884	30480	1.05	1.5E-01	AF06313.1	NT	Morone saxatilis gonadotropin-releasing hormone type II gene, complete cds
5175	17984	30499	2.16	1.5E-01	P07996	SWISSPROT	THROMBOSPONDIN 1 PRECURSOR
5203	18011	30632	1.15	1.5E-01	AF256852.1	NT	Galman crocodilus MHC class II beta chain (hclbeta) gene, complete cds
5245	18051		6.92	1.5E-01	P15196	SWISSPROT	SEX HORMONE-BINDING GLOBULIN PRECURSOR (SHBG) (SEX STEROID-BINDING PROTEIN) (SBP) (TESTIS-SPECIFIC ANDROGEN-BINDING PROTEIN) (ABP)
5451	18250	31139	5.08	1.5E-01	AW850754.1	EST_HUMAN	IL3-CT0219-180200-084-F10 CT0219 Homo sapiens cDNA
5482	18291	31188	8.42	1.5E-01	U65018.1	NT	Mus musculus transforming growth factor alpha (TGfa) mRNA, complete cds
5492	18291	31189	8.42	1.5E-01	U65018.1	NT	Mus musculus transforming growth factor alpha (TGfa) mRNA, complete cds
5915	18700	31663	3.09	1.5E-01	6753659	NT	Mus musculus DNA methyltransferase 2 (Dnmt2), mRNA
5915	18700	31664	3.09	1.5E-01	6753659	NT	Mus musculus DNA methyltransferase 2 (Dnmt2), mRNA
5952	18734	31693	1.83	1.5E-01	AJ276505.1	NT	Mus musculus genomic fragment, 279 Kb, chromosome 7
6102	18880	31847	3.1	1.5E-01	BE727658.1	EST_HUMAN	601564322F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3833081 5'
6152	18829		1.77	1.5E-01	4506396	NT	Homo sapiens RAD64 (S.cerevisiae)-like (RAD64L) mRNA
6251	19025	31989	2.09	1.5E-01	AF134907.1	NT	Influenza B virus (B/Nanchang/480/94) NB protein gene, complete cds; and neuraminidase gene, partial cds
6409	25089	32176	2.21	1.5E-01	AE001039.1	NT	Archaeoglobus fulgidus section 88 of 172 of the complete genome
6437	19205	32201	4.99	1.5E-01	11417238	NT	Homo sapiens chromosome 5 open reading frame 3 (C5ORF3), mRNA
6448	19216	32214	1.95	1.5E-01	P48508	SWISSPROT	GLUTAMATE-CYSTEINE LIGASE REGULATORY SUBUNIT (GAMMA-GLUTAMYL-CYSTEINE SYNTHETASE) (GAMMA-ECS) (GCS LIGHT CHAIN)
6493	19259	32280	2.35	1.5E-01	Q28462	SWISSPROT	AMELOGENIN
6585	19348	32361	1.26	1.5E-01	AA714790.1	EST_HUMAN	mw30d10.s1 NCL_CGAP_GCB0 Homo sapiens cDNA clone IMAGE:1241971 3'
6612	19375	32389	1.88	1.5E-01	P30143	SWISSPROT	HYPOTHETICAL 51.7 KD PROTEIN IN THRC-TALB INTERGENIC REGION (ORF8)
6982	17958	30554	6.82	1.5E-01	AW970295.1	EST_HUMAN	EST382378 IMAGE resequences, MAGK Homo sapiens cDNA
6918	25102		0.79	1.5E-01	AA811545.1	EST_HUMAN	cb73f02.s1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1337019 3' similar to contains element LTR2 repetitive element
7115	18803		2.07	1.5E-01	AF210842.1	NT	Homo sapiens HARP (HARP) gene, exon 17 and complete cds
7290	19973	33051	2.96	1.5E-01	AB73157.1	EST_HUMAN	wf52-08.x1 NCL_CGAP_UH1 Homo sapiens cDNA clone IMAGE:24671310 3'
7490	20162	33254	2.04	1.5E-01	AF289073.1	NT	Bos taurus Niemann-Pick type C1 disease protein (NPC1) mRNA, complete cds
7490	20162	33255	2.04	1.5E-01	AF289073.1	NT	Bos taurus Niemann-Pick type C1 disease protein (NPC1) mRNA, complete cds
7499	20171	33262	2.04	1.5E-01	AW500611.1	EST_HUMAN	UHF-BN0-akk-d-05-0-UJ1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3077409 5'
7499	20171	33263	2.04	1.5E-01	AW500611.1	EST_HUMAN	UHF-BN0-akk-d-05-0-UJ1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3077409 5'
7640	20305	33414	0.81	1.5E-01	U46560.1	NT	Saccharomyces cerevisiae weak multifcopy suppressor of los1-1 (SOL3) gene, complete cds
7957	20652	33775	0.98	1.5E-01	P21303	SWISSPROT	MEROZOITE RECEPTOR PK66 PRECURSOR (66 KD PROTECTIVE MINOR SURFACE ANTIGEN)

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8116	20612	33947	1.13	1.5E-01	AA970317.1	EST_HUMAN	cc85g12.s1 NCI_CGAP_Kd5 Homo sapiens cDNA clone IMAGE:1573030 3' similar to gb:M26062 INTERLEUKIN-2 RECEPTOR BETA CHAIN PRECURSOR (HUMAN);
8211	20605		0.95	1.5E-01	BE884799.1	EST_HUMAN	801510623F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3912004 5'
8289	20983		11.54	1.5E-01	C16800.1	EST_HUMAN	C16800 Clontech human scrla polyA+ mRNA (#8572) Homo sapiens cDNA clone GEN-528H09 5'
8332	21025	34182	1.6	1.5E-01	L27835.1	NT	Pargastanodon oligas growth hormone (GH) mRNA, complete cds
8491	21183	34325	1.85	1.5E-01	D84476.1	NT	Homo sapiens mRNA for ASK1, complete cds
8512	21204		0.71	1.5E-01	P43448	SWISSPROT	WNT-10A PROTEIN PRECURSOR
8737	21429	34575	1.16	1.5E-01	4501972	NT	Homo sapiens adaptor-related protein complex 1, beta 1 subunit (ADTB1), mRNA
9002	21692	34842	2.88	1.5E-01	N74228.1	EST_HUMAN	za59e08.s1 Soares fetal liver spleen 1NFSL Homo sapiens cDNA clone IMAGE:298886 3' similar to PIR:S44443 S44443 RAD23 protein homolog 2 - human;
9092	21781	34945	1	1.5E-01	BF685495.1	EST_HUMAN	GVO000404 Human Pearlaia Differential Display Homo sapiens cDNA
9100	21788		2.3	1.5E-01	AV754819.1	EST_HUMAN	AV754819 TP Homo sapiens cDNA clone TPAH1B12 5'
9305	21972		0.74	1.5E-01	AU130007.1	EST_HUMAN	AU130007 NT2RP3 Homo sapiens cDNA clone NT2RP3000080 5'
9353	20424	33543	7.32	1.5E-01	U00455.1	NT	Aspergillus transmembrane vitellin mRNA, partial cds
9717	22368	35596	0.93	1.5E-01	M77144.1	NT	Human type II 3-beta hydroxysteroid dehydrogenase/ 5-delta - 4-delta isomerase gene, complete cds
9821	22472	35674	7.51	1.5E-01	AF007570.1	NT	Aplysia californica carboxypeptidase D mRNA, complete cds
9821	22472	35675	7.51	1.5E-01	AF007570.1	NT	Aplysia californica carboxypeptidase D mRNA, complete cds
10103	22751	35985	2.92	1.5E-01	X98852.1	NT	P. lenisculus mRNA for integrin beta subunit
10207	22855	36070	2.16	1.5E-01	AI814046.1	EST_HUMAN	wk53h12.x1 NCI_CGAP_Py22 Homo sapiens cDNA clone IMAGE:2419175 3' similar to gb:M27508 BETA GALACTOSIDASE-RELATED PROTEIN PRECURSOR (HUMAN);
10207	22855	36071	2.16	1.5E-01	AI814046.1	EST_HUMAN	wk53h12.x1 NCI_CGAP_Py22 Homo sapiens cDNA clone IMAGE:2419175 3' similar to gb:M27508 BETA GALACTOSIDASE-RELATED PROTEIN PRECURSOR (HUMAN);
10285	22933	36148	2.01	1.5E-01	U40832.1	NT	Danio rerio transcription factor Pax6b (Pax6) mRNA, complete cds
10438	23084	36311	1.43	1.5E-01	AJ011984.1	NT	Citricaps purpurea ps1 gene
10438	23084	36312	1.43	1.5E-01	AJ011984.1	NT	Citricaps purpurea ps1 gene
10595	23289	36526	1.62	1.5E-01	BE088492.1	EST_HUMAN	CM2-BT0688-210300-122-f11 BT0688 Homo sapiens cDNA
10595	23289	36527	1.62	1.5E-01	BE088492.1	EST_HUMAN	CM2-BT0688-210300-122-f11 BT0688 Homo sapiens cDNA
10728	23414	36654	7.31	1.5E-01	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
10728	23414	36655	7.31	1.5E-01	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
10896	23576		1.7	1.5E-01	AB042975.1	NT	Sus scrofa CYP51 gene for lanosterol 14 alpha-demethylase, exon 1
11012	23684	36944	1.6	1.5E-01	AW841915.1	EST_HUMAN	IL5-CN0024-030300-025-D04 CN0024 Homo sapiens cDNA
11057	23727	36999	1.95	1.5E-01	AA425488.1	EST_HUMAN	zw48402.r1 Soares fetal_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:773091 5' similar to contains element MER22 repetitive element;

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11119	19973	33051	1.68	1.5E-01	AI973167.1	EST_HUMAN	wf52c08.x1 NCI_CGAP_U1 Homo sapiens cDNA clone IMAGE:2491310 3'
11625	24222		1.68	1.5E-01	AI193704.1	EST_HUMAN	q972e01.x1 Soares fetal lung Nhlh19W Homo sapiens cDNA clone IMAGE:1744536 3' similar to
11959	25202		11.07	1.5E-01	BF700682.1	EST_HUMAN	gb:M17887.605 ACIDIC RIBOSOMAL PROTEIN P2 (HUMAN);
12320	24739		1.37	1.5E-01	AF030358.2	NT	602128763F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:4285549 5'
12324	24743		1.77	1.5E-01	AJ238332.1	NT	Rattus norvegicus chondroline CX3C mRNA, complete cds
							Mus musculus mRNA for death inducer-obliterant-1 (Dio-1)
12369	24771		5.35	1.5E-01	AB026998.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
12385	25220		9.97	1.5E-01	R83077.1	EST_HUMAN	yp87e04.r1 Soares fetal liver spleen 1NfLS Homo sapiens cDNA clone IMAGE:194430 5'
12472	25241		2.53	1.5E-01	AV741272.1	EST_HUMAN	AV741272 CB Homo sapiens cDNA clone C8DAG004 5'
12573	25150	30897	9.2	1.5E-01	AL139074.2	NT	Campylobacter jejuni NC1G11188 complete genome; segment 1/6
12783	25036	30965	1.89	1.5E-01	AJ276242.1	NT	Sus scrofa mRNA for sodium iodide symporter
292	13098		1.72	1.4E-01	AF009663.1	NT	Homo sapiens T cell receptor beta locus, TCRBV858P to TCRBV21S2A2 region
890	13659		3.62	1.4E-01	U78638.1	NT	Xenopus laevis mRNA for DNA (cytosine-5)-methyltransferase, complete cds
1236	13985		2.48	1.4E-01	T91864.1	EST_HUMAN	yd54c01.s1 Soares fetal liver spleen 1NfLS Homo sapiens cDNA clone IMAGE:112032 3'
1742	14484		1.5	1.4E-01	8879980	NT	Mus musculus growth differentiation factor 5 (Gdf5), mRNA
1745	14487	27186	1.71	1.4E-01	AE001710.1	NT	Thermotoga maritima section 22 of 138 of the complete genome
1898	14635		0.98	1.4E-01	AW135741.1	EST_HUMAN	UI-H-B11-ect-a-09-O-UJ1.s1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2714009 3'
1978	14714		9.33	1.4E-01	AA720615.1	EST_HUMAN	ny72d07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1283821 3'
2478	15196	27835	1.38	1.4E-01	P30706	SWISSPROT	GLYCEROL-3-PHOSPHATE ACYLTRANSFERASE PRECURSOR (GPAT)
2795	15500	28241	4.23	1.4E-01	AI833498.1	EST_HUMAN	wm74d01.x1 NCI_CGAP_U12 Homo sapiens cDNA clone IMAGE:2441665 3'
3879	16629	29267	0.96	1.4E-01	R50232.1	EST_HUMAN	yg97a03.r1 Soares infant brain 1NIB Homo sapiens cDNA clone IMAGE:41467 5'
3879	16629	29268	0.96	1.4E-01	R59232.1	EST_HUMAN	yg97a03.r1 Soares infant brain 1NIB Homo sapiens cDNA clone IMAGE:41467 5'
4163	16895	29524	8.89	1.4E-01	AI699094.1	EST_HUMAN	bs58c02.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:2273570 3'
4163	16895	29525	8.89	1.4E-01	AI699094.1	EST_HUMAN	bs58c02.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:2273570 3'
4212	16953	29577	3.73	1.4E-01	AE001710.1	NT	Thermotoga maritima section 22 of 138 of the complete genome
5014	17735	30342	0.94	1.4E-01	U12283.1	NT	Mus musculus transcription factor USF2 (USF2) gene, exons 8-10 and complete cds
5223	18030	30856	5.48	1.4E-01	T90877.1	EST_HUMAN	ye15c11.s1 Stratagene lung (#937210) Homo sapiens cDNA clone IMAGE:117812 3'
5246	18052	30879	4.8	1.4E-01	AB004556.1	NT	Candida tropicalis DNA for mitochondrial NADP-linked isocitrate dehydrogenase, complete cds
5246	18052	30880	4.8	1.4E-01	AB004556.1	NT	Candida tropicalis DNA for mitochondrial NADP-linked isocitrate dehydrogenase, complete cds
6205	18980	31959	3	1.4E-01	BE328891.1	EST_HUMAN	hr67c02.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3133358 3'
6391	19160	32160	5.6	1.4E-01	AU117147.1	EST_HUMAN	AU117147 HEMBA1 Homo sapiens cDNA clone HEMBA1000769 5'
6391	19160	32161	5.6	1.4E-01	AU117147.1	EST_HUMAN	AU117147 HEMBA1 Homo sapiens cDNA clone HEMBA1000769 5'
6477	19244	32244	3.14	1.4E-01	AW082798.1	EST_HUMAN	x571d12.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2681751 3'



Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6490	19257		1.64	1.4E-01	BE266536.1	EST_HUMAN	601103523F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3537581 5'
6509	19274	32275	2.45	1.4E-01	BF378533.1	EST_HUMAN	QV1-UM0038-080300-103-d08 UM0038 Homo sapiens cDNA
7026	19718		0.65	1.4E-01	AL118588.1	EST_HUMAN	DKFZp761A0910.1 761 (synonym: hairy2) Homo sapiens cDNA clone DKFZp761A0910 5'
7284	19987		1.51	1.4E-01	AW015373.1	EST_HUMAN	UH-B10-aat-c-09-UJ.s1 NCI_CGAP_Sub1 Homo sapiens cDNA clone IMAGE:2710289 3'
7521	20192	33263	1.19	1.4E-01	U85845.1	NT	Oryctolagus cuniculus fructose 1,6-bisphosphate aldolase (AldB) gene, complete cds
7653	20317	33427	0.88	1.4E-01	AI305192.1	EST_HUMAN	q180b12.x1 Soares_NHIMPu_S1 Homo sapiens cDNA clone IMAGE:1879583 3'
8373	21066		1.23	1.4E-01	AV66047.1	EST_HUMAN	AV66047 GLC Homo sapiens cDNA clone GLCFSH06 3'
8983	21375		0.57	1.4E-01	AI436093.1	EST_HUMAN	fr62b12.x1 Soares_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:2126111 3' similar to TR:002710 O02710 GAG POLYPEPTIDE.
8911	21503	34850	4.18	1.4E-01	AA307073.1	EST_HUMAN	EST178192 Colon carcinoma (HCC) cell line Homo sapiens cDNA 5' end
8982	21593	34722	0.59	1.4E-01	AW023636.1	EST_HUMAN	df58b03.y1 Morton Fetal Cochlea Homo sapiens cDNA clone IMAGE:2487485 5'
9021	21711	34864	0.87	1.4E-01	R62746.1	EST_HUMAN	Y10H05.11 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:138873 5'
9021	21711	34865	0.97	1.4E-01	R62746.1	EST_HUMAN	Y10H05.11 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:138873 5'
9085	21774	34938	8.81	1.4E-01	BF310659.1	EST_HUMAN	601895465F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4124824 5'
9175	21845	35011	1.24	1.4E-01	W93411.1	EST_HUMAN	zfr6404.1 Soares_fetal_heart_NbHH19W Homo sapiens cDNA clone IMAGE:357102 5' similar to contains element KER repetitive element;
9246	21925	35095	0.46	1.4E-01	X73283.1	NT	M. variellii genes rpoH, rpoB and rpoA
9246	21925	35096	0.46	1.4E-01	X73283.1	NT	M. variellii genes rpoH, rpoB and rpoA
9258	21937	35111	1.46	1.4E-01	Y10198.1	NT	Homo sapiens PHEX gene
9268	21937	35112	1.46	1.4E-01	Y10198.1	NT	Homo sapiens PHEX gene
9350	20421	33541	1.96	1.4E-01	AF121361.1	NT	Drosophila melanogaster signal transducing adaptor protein (STAM), serine threonine kinase 1a1 (IAL), and zinc finger protein (DNZ1) genes, complete cds
9704	22356	35551	0.97	1.4E-01	X66082.1	NT	C. parvifrons ORF for putative membrane transport protein
9887	22537	35732	1.26	1.4E-01	AF023813.1	NT	Macromitrium levetum small ribosomal protein 4 (rps4) gene, chloroplast gene encoding chloroplast protein, partial cds
9988	22636	35946	0.68	1.4E-01	AW021908.1	EST_HUMAN	df22b08.y1 Morton Fetal Cochlea Homo sapiens cDNA clone IMAGE:2485094 5'
9988	22636	35947	0.66	1.4E-01	AW021908.1	EST_HUMAN	df22b08.y1 Morton Fetal Cochlea Homo sapiens cDNA clone IMAGE:2485094 5'
10157	22805	36022	0.81	1.4E-01	BF375285.1	EST_HUMAN	MF3-ST0218-211299-013-a08 ST0218 Homo sapiens cDNA
10157	22805	36023	0.81	1.4E-01	BF375285.1	EST_HUMAN	MF3-ST0218-211299-013-a08 ST0218 Homo sapiens cDNA
10360	23007		0.57	1.4E-01	T84283.1	EST_HUMAN	yc47d03.1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:111365 6'
10469	23145	36372	0.62	1.4E-01	Z99117.1	NT	Bacillus subtilis complete genome (section 14 of 21): from 2599451 to 2812870
10607	23301		1.64	1.4E-01	AA811480.1	EST_HUMAN	oa89a03.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1320384 3'
10746	23433	36676	3.24	1.4E-01	R33400.1	EST_HUMAN	y70c05.1 Soares breast 2NHLBst Homo sapiens cDNA clone IMAGE:154088 5'
10954	23631	36678	1.31	1.4E-01	AW104982.1	EST_HUMAN	xd73e10.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2803274 3'

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11036	23707	36975	1.3	1.4E-01	T86102.1	EST_HUMAN	ye47g10.11 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:120630 5'
11036	23707	36976	1.3	1.4E-01	T86102.1	EST_HUMAN	ye47g10.11 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:120630 5'
11038	23709	36979	2.35	1.4E-01	P08648	SWISSPROT	INTEGRIN ALPHA-5 PRECURSOR (FIBRONECTIN RECEPTOR ALPHA SUBUNIT) (INTEGRIN ALPHA-F) (VLA-6) (CD49E)
11262	23924	37215	1.89	1.4E-01	X68092.1	NT	C.perfringens ORF for putative membrane transport protein
11301	19867		1.41	1.4E-01	AW015373.1	EST_HUMAN	UI-HBIO-est-c-09-0-UI.s1 NCI CGAP Sub1 Homo sapiens cDNA clone IMAGE:2710289 3'
11449	23213	36445	2.37	1.4E-01	U28760.1	NT	Borrelia burgdorferi glyceralddehyde-3-phosphate dehydrogenase (GAPDH), phosphoglycerate kinase (PGK), triosephosphate isomerase (TPI) genes, complete cds
11512	24112		1.82	1.4E-01	X52102.1	NT	M.musculus p16K gene for 16 kDa protein
11743	24335	37661	1.83	1.4E-01	AF146793.2	NT	Mus musculus neuromedin U precursor (Nmu) gene, partial cds; tPnLP (Tphb) gene, partial cds; CLOCK (Clock) gene, complete cds; PFT27 (Pht27) gene, complete cds; and H5AR (H5ar) gene, complete cds
11827	24411	37747	1.31	1.4E-01	AW684572.1	EST_HUMAN	h14h08.x1 NCI CGAP GU1 Homo sapiens cDNA clone IMAGE:2872319 3'
11827	24411	37748	1.31	1.4E-01	AW684572.1	EST_HUMAN	h14h08.x1 NCI CGAP GU1 Homo sapiens cDNA clone IMAGE:2872319 3'
12213	25172	30904	1.96	1.4E-01	AB000980.1	NT	Ephydratia fluvialis mRNA for aldolase, partial cds
12281	24708	31049	2.03	1.4E-01	X74773.1	NT	P. salina plasmid gene secY
12275	24714		2.2	1.4E-01	11988117	NT	Rattus norvegicus desmin (Des), mRNA
12318	25393		2.84	1.4E-01	BE513802.1	EST_HUMAN	601315638F1 NIH_MGC_3 Homo sapiens cDNA clone IMAGE:3634329 5'
12413	24794		1.36	1.4E-01	AF083221.1	NT	Fugu rubripes putative neurotransmitter receptors, YDR140w homolog, and glycineamide ribonucleotide transferase (GART) genes, complete cds
12425	24801		2.97	1.4E-01	D64004.1	NT	Synechocystis sp. PCC6803 complete genome, 23/27, 2868767-3002965
12500	25407		3.15	1.4E-01	P10447	SWISSPROT	TYROSINE-PROTEIN KINASE TRANSFORMING PROTEIN ABL
12708	25221		6.26	1.4E-01	D82983.1	NT	Mus musculus mRNA for prolidase, complete cds
12779	25033		2.37	1.4E-01	AW377998.1	EST_HUMAN	MRO-HT0208-221299-204-c06 HT0208 Homo sapiens cDNA
314	13118	25758	3.12	1.3E-01	4758487	NT	Homo sapiens G protein-coupled receptor 50 (GPR50) mRNA
314	13118	25757	3.12	1.3E-01	4758487	NT	Homo sapiens G protein-coupled receptor 50 (GPR50) mRNA
516	13300	25832	2.8	1.3E-01	AB013139.1	NT	Homo sapiens gene for NBS1, complete cds
621	13400	26035	1.05	1.3E-01	AJ277806.1	NT	Human calicivirus HU/NLV/Girlington/93/UK RNA for capsid protein (ORF2), strain HU/NLV/Girlington/93/UK
621	13400	26036	1.05	1.3E-01	AJ277806.1	NT	Human calicivirus HU/NLV/Girlington/93/UK RNA for capsid protein (ORF2), strain HU/NLV/Girlington/93/UK
824	13594	26264	0.92	1.3E-01	X53330.1	NT	P. dumerilli histone gene cluster for core histones H2A, H2B, H3 and H4
874	13643	26313	1.8	1.3E-01	AF139518.1	NT	Rattus norvegicus A-kinase anchor protein mRNA, complete cds
1005	13785	26425	1.31	1.3E-01	AL117078.1	NT	Botrytis cinerea strain T4 cDNA library under conditions of nitrogen deprivation

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1105	13662		2.6	1.3E-01	AL115265.1	NT	Botrytis cinerea strain T4 cDNA library under conditions of nitrogen deprivation
1183	13945	26809	1.13	1.3E-01	AV712467.1	EST_HUMAN	AV712467 DCA Homo sapiens cDNA clone DCAAFF05 5'
1425	14172		1.18	1.3E-01	AF149277.1	NT	Homo sapiens adapter protein CMS mRNA, complete cds
1850	14588	27303	0.97	1.3E-01	6880957	NT	Mus musculus procollagen, type XI, alpha 1 (Col11a1), mRNA
1952	14687	27400	2.18	1.3E-01	AL1117078.1	NT	Botrytis cinerea strain T4 cDNA library under conditions of nitrogen deprivation
2167	14898		1.22	1.3E-01	AJ243578.1	NT	Rhodospseudomonas acidophila pucB5, pucA5, pucB6, pucA6, pucA7, pucA8 and pucC genes and ORF151
2288	15013		1.2	1.3E-01	AW812104.1	EST_HUMAN	RC4-ST0173-191089-032-d12 ST0173 Homo sapiens cDNA
2379	15101		3.34	1.3E-01	AE001016.1	NT	Archaeoglobus fulgidus section 91 of 172 of the complete genome
2682	15306	28042	4.76	1.3E-01	M86918.1	NT	Cerasiulus auratus keratin type I mRNA, complete cds
3065	15831	28474	1.01	1.3E-01	AL163207.2	NT	Homo sapiens chromosome 21 segment HS21C007
3443	16199	28849	0.98	1.3E-01	M21572.1	NT	Bovine branched chain alpha-keto acid dihydrolipoyl transacylase mRNA, complete cds
3669	16718		1.43	1.3E-01	AL161581.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 77
4117	16839		1.27	1.3E-01	AF020713.1	NT	Bacteriophage SPBc2 complete genome
4137	16879		4.24	1.3E-01	AW364341.1	EST_HUMAN	QV3-DT0018-081299-036-s03 DT0018 Homo sapiens cDNA
4145	16887	29518	2.03	1.3E-01	AF026805.1	NT	Schistosoma mansoni fructose biphosphate aldolase mRNA, complete cds
4163	16903	29532	18.52	1.3E-01	AW273741.1	EST_HUMAN	xv23f10.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2813965 3'
4257	16988	29827	0.99	1.3E-01	AV752279.1	EST_HUMAN	AV752279 NPD Homo sapiens cDNA clone NPDAZE02 5'
4257	16998	29828	0.99	1.3E-01	AV752279.1	EST_HUMAN	AV752279 NPD Homo sapiens cDNA clone NPDAZE02 5'
4278	17018		12.76	1.3E-01	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
4445	17181	29806	0.77	1.3E-01	M21572.1	NT	Bovine branched chain alpha-keto acid dihydrolipoyl transacylase mRNA, complete cds
4497	17233	29863	2.68	1.3E-01	BE272339.1	EST_HUMAN	601126096F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:2990083 5'
4863	17688		0.74	1.3E-01	BF091980.1	EST_HUMAN	RC4-TN0077-180900-012-c06 TN0077 Homo sapiens cDNA
5242	18048	30877	0.83	1.3E-01	AW466988.1	EST_HUMAN	ha07b00.x1 NCL_CGAP_KD12 Homo sapiens cDNA clone IMAGE:2872979 3' similar to contains L1.b1 L1
5278	18088	30739	2.23	1.3E-01	AW804417.1	EST_HUMAN	QV0-UM0083-100400-189-a08 UM0083 Homo sapiens cDNA
5414	18213		0.77	1.3E-01	AF107783.1	NT	Emmericella nidulans DNA-dependent RNA polymerase II RPB140 (RPB2) gene, partial cds
5497	18295		0.75	1.3E-01	AF056880.1	NT	Hepatitis C virus 68_C10 genome polyprotein gene, partial cds
5638	18433	31346	0.97	1.3E-01	BF210020.1	EST_HUMAN	601674501F1 NIH_MGC_54 Homo sapiens cDNA clone IMAGE:4101119 5'
5896	18681	31828	0.57	1.3E-01	BF527281.1	EST_HUMAN	602039337F2 NCL_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4177233 5'
5896	18681	31629	0.57	1.3E-01	BF527281.1	EST_HUMAN	602039337F2 NCL_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4177233 5'
6392	19161	32162	15.12	1.3E-01	AB031328.1	NT	Schizosaccharomyces pombe gene for Alp41, complete cds
6474	19241	32241	1.95	1.3E-01	X88891.1	NT	C.jacchius intron 4 of visual pigment gene (red allele)
6691	19608		0.75	1.3E-01	W26367.1	EST_HUMAN	26f3 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6814	19651		0.99	1.3E-01	BF529560.1	EST_HUMAN	602044345F1 NCI CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4181866 5'
7162	19849		1.98	1.3E-01	H48094.1	EST_HUMAN	y33402.1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:207075 5'
7859	20554		0.88	1.3E-01	BE272330.1	EST_HUMAN	601126085F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:2990063 5'
7873	20568	33884	1.34	1.3E-01	11423284	NT	Homo sapiens PRO0611 protein (PRO0611), mRNA
7902	20597	33727	1.17	1.3E-01	BF690522.1	EST_HUMAN	602187015T1 NIH_MGC_49 Homo sapiens cDNA clone IMAGE:4299074 3'
8136	20830		0.51	1.3E-01	BE567528.1	EST_HUMAN	601335829F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3689634 5'
8172	20866	33898	0.64	1.3E-01	11421558	NT	Homo sapiens TED protein (TED), mRNA
8243	20937		4.47	1.3E-01	Z74102.1	NT	S. cerevisiae chromosome IV reading frame ORF YDL054c
8285	20979		4.44	1.3E-01	8923919	NT	Homo sapiens core histone macroH2A2.2 (MACROH2A2), mRNA
8428	21119	34258	1.02	1.3E-01	BF680522.1	EST_HUMAN	602187015T1 NIH_MGC_49 Homo sapiens cDNA clone IMAGE:4299074 3'
8847	21538	34683	0.58	1.3E-01	R11172.1	EST_HUMAN	y39g11.1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:129284 5' similar to SP:RL2B_RAT P28316 60S RIBOSOMAL PROTEIN ;
8847	21538	34684	0.58	1.3E-01	R11172.1	EST_HUMAN	y39g11.1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:129284 5' similar to SP:RL2B_RAT P28316 60S RIBOSOMAL PROTEIN ;
9119	21807	34973	0.61	1.3E-01	11068003	NT	Plutella xylostella granulovirus, complete genome
9119	21807	34974	0.61	1.3E-01	11068003	NT	Plutella xylostella granulovirus, complete genome
9372	21947	35120	3.71	1.3E-01	AF023129.1	NT	Oryctolagus cuniculus H+K-ATPase alpha 2c subunit mRNA, complete cds
9671	22323		0.56	1.3E-01	N86348.1	EST_HUMAN	J7837F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA clone J7837 5' similar to B-CELL RECEPTOR ASSOCIATED PROTEIN (BAP) 29
9851	22599		0.99	1.3E-01	8393940	NT	Rattus norvegicus peptidyl arginine deiminase, type IV (PdI4), mRNA
10030	22678	35894	0.85	1.3E-01	AW851899.1	EST_HUMAN	MF2-CT0222-201089-001-e01 CT0222 Homo sapiens cDNA
10291	25128	36151	1.1	1.3E-01	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
10423	23069	36290	0.84	1.3E-01	AU121237.1	EST_HUMAN	AU121237 HEMBB1 Homo sapiens cDNA clone HEMBB1002387 5'
10471	23117	36347	0.62	1.3E-01	AW247836.1	EST_HUMAN	2820637.3 prime NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2820637 3'
10528	23225		2.93	1.3E-01	BF330099.1	EST_HUMAN	MF4-BT0358-130700-010-08 BT0358 Homo sapiens cDNA
10775	23458	36701	1.56	1.3E-01	H01883.1	EST_HUMAN	y32409.1 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:150449 5'
11039	23710	36880	1.33	1.3E-01	AF119117.1	NT	Homo sapiens dopamine transporter (SLC6A3) gene, complete cds
11216	23879		3.28	1.3E-01	6071745	NT	Mus musculus coflin 2, muscle (Cf2), mRNA
11304	23963	37263	1.42	1.3E-01	BF677328.1	EST_HUMAN	602087045F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4251346 5'
11304	23963	37264	1.42	1.3E-01	BF677328.1	EST_HUMAN	602087045F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4251346 5'
11589	24188	37504	4.26	1.3E-01	BE279449.1	EST_HUMAN	601158052F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3504804 5'
11723	24317	37640	1.94	1.3E-01	BE616384.1	EST_HUMAN	601473369F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3876208 5'
11755	24346	37676	1.44	1.3E-01	BF683565.1	EST_HUMAN	602139760F1 NIH_MGC_46 Homo sapiens cDNA clone IMAGE:4300963 5'
12114	24807	31088	1.37	1.3E-01	BE618346.1	EST_HUMAN	601462741F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3868003 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12247	24695		4.43	1.3E-01	AJ242780.1	NT	Gallus gallus eyoc1 gene for lymphotactin, exons 1-3
12274	24713		1.51	1.3E-01	Z13894.1	NT	R. norvegicus crp2 gene for cystatin related protein 2
12806	24815		1.43	1.3E-01	AB028829.1	NT	Ephydraia fluviatilis mRNA for aALK-6, complete cds
12836	24936		2.26	1.3E-01	AW001114.1	EST_HUMAN	wu24409.x1 Soares_Deckgraefe_cdon_NHCD Homo sapiens cDNA clone IMAGE:2520977 3' similar to TR:Q60287 O60287 KIAA0539 PROTEIN.;
374	13189	25844	8.42	1.2E-01	A1421744.1	EST_HUMAN	U39602.x1 NCI_CGAP_Bm23 Homo sapiens cDNA clone IMAGE:2088539 3' similar to gb:U05760_ma1
415	12826		1.06	1.2E-01	U66912.1	NT	ANNEXIN V (HUMAN);
634	13317		4.33	1.2E-01	AF039442.1	NT	Dicystotellum discoideum ORF DG1016 gene, partial cds
1365	14103	28778	3.22	1.2E-01	AU149146.1	EST_HUMAN	Homo sapiens colon cancer antigen NY-CO-45 mRNA, partial cds
1365	14103	28779	3.22	1.2E-01	AU149146.1	EST_HUMAN	AU149146 NT2RM4 Homo sapiens cDNA clone NT2RM4001691 3'
1362	14110		4.36	1.2E-01	AV735249.1	EST_HUMAN	AU149146 NT2RM4 Homo sapiens cDNA clone NT2RM4001691 3'
1498	14243		1.23	1.2E-01	AA897474.1	EST_HUMAN	AV735249 cda Homo sapiens cDNA clone cdaAJB11 5'
1627	14373	27082	1.26	1.2E-01	Q14934	SWISSPROT	sl48609.s1 Soares_NFL_T_GBC S1 Homo sapiens cDNA clone IMAGE:1460584 3' similar to TR:Q16871
1646	14392	27082	2.81	1.2E-01	A1285402.1	EST_HUMAN	Q16871 ANTHMULLERIAN HORMONE TYPE II RECEPTOR PRECURSOR.;
1762	14504		20.17	1.2E-01	X88211.1	NT	NUCLEAR FACTOR OF ACTIVATED T-CELLS, CYTOPLASMIC 4 (T CELL TRANSCRIPTION FACTOR NFAT3) (NF-ATC4) (NF-AT3)
1913	14650		1.03	1.2E-01	AW449388.1	EST_HUMAN	q16909.x1 NCI_CGAP_Esc2 Homo sapiens cDNA clone IMAGE:1960553 3'
2181	14910	27842	1.75	1.2E-01	BF248490.1	EST_HUMAN	H. sapiens DNA for endogenous retroviral like element
2284	15008	27748	1.2	1.2E-01	AL163213.2	NT	U1H-B13-alc-e-10-Q-UJ.s1 NCI_CGAP_Sub5 Homo sapiens cDNA clone IMAGE:2734554 3'
2597	15311	28047	1.49	1.2E-01	AW066556.1	EST_HUMAN	601821567F1 NIH MGC_62 Homo sapiens cDNA clone IMAGE:4046224 5'
							Homo sapiens chromosome 21 segment HS21C013
							QV3-BN0046-220300-12p-f10 BN0046 Homo sapiens cDNA
							ts18g07.x1 NCI_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2228988 3' similar to TR:Q14048 Q14048
2731	15438	28176	1.12	1.2E-01	A1623388.1	EST_HUMAN	COLLAGEN VI ALPHA-2 ALTERNATIVE C-TERMINAL DOMAIN. [1] ; contains element PTR5 repetitive element ;
2847	16616	28262	1.3	1.2E-01	U18016.1	NT	Human E1A enhancer binding protein (E1A-F) mRNA, partial cds
2903	15689	28318	2.5	1.2E-01	A1720470.1	EST_HUMAN	es80cd09.x1 Barstead cdon HPLR87 Homo sapiens cDNA clone IMAGE:2335024 3' similar to gb:L05095
2935	15701	28350	2.92	1.2E-01	M16384.1	NT	60S RIBOSOMAL PROTEIN L30 (HUMAN);
3004	15770	28418	0.97	1.2E-01	XG6882.1	NT	Human creatine kinase-B mRNA, complete cds
3224	15967	28641	1.59	1.2E-01	AW370688.1	EST_HUMAN	Wheat mRNA for a group 3 late embryogenesis abundant protein (LEA)
3252	16014		1.12	1.2E-01	U67600.1	NT	QV1-BT0259-261089-021-d05 BT0259 Homo sapiens cDNA
3472	16228		0.8	1.2E-01	Z99118.1	NT	Methanococcus jannaschii section 142 of 150 of the complete genome
3511	16287	28921	0.82	1.2E-01	XG6882.1	NT	Bacillus subtilis complete genome (section 15 of 21); from 2796131 to 3013540
							Wheat mRNA for a group 3 late embryogenesis abundant protein (LEA)

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3511	16287	28022	0.82	1.2E-01	X68882.1	NT	Wheat mRNA for a group 3 late embryogenesis abundant protein (LEA)
3562	16228		1.46	1.2E-01	Z89118.1	NT	Bacillus subtilis complete genome (section 15 of 21); from 2795131 to 3013540
4160	16900	29528	1.97	1.2E-01	Z54255.1	NT	P. clarkii mRNA; repeat region (ID 2MR17)
4160	16900	29529	1.97	1.2E-01	Z54255.1	NT	P. clarkii mRNA; repeat region (ID 2MR17)
4872	17406	30041	1.1	1.2E-01	Z48183.1	NT	L. esculentum mRNA for glycylase-1
4739	17471		0.92	1.2E-01	AF221633.1	NT	Rana ridibunda pituitary adenylate cyclase-activating polypeptide variant 2 precursor, mRNA, complete cds, alternatively spliced
5170	17979	30492	0.81	1.2E-01	AA744369.1	EST_HUMAN	my63c04.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1282850 3'
5217	18025	30649	1	1.2E-01	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
5227	18034	30659	2.59	1.2E-01	W33035.1	EST_HUMAN	z08d02.r1 Soares_papillary_tumor_NbHPA Homo sapiens cDNA clone IMAGE:321869 5'
5284	18059	30749	2.3	1.2E-01	Z98266.1	NT	Homo sapiens gene encoding plakophilin (exons 1-13)
5418	18217	30828	0.68	1.2E-01	Z48234.1	NT	M. domestica Borkh. Grenny Smith adh mRNA for alcohol dehydrogenase
6107	18884	31853	1.93	1.2E-01	BE620945.1	EST_HUMAN	601463518F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3895613 5'
6153	18930	31898	1.36	1.2E-01	P10842	SWISSPROT	MATING-TYPE P-SPECIFIC POLYPEPTIDE P1
6206	18981	31960	2.35	1.2E-01	AW845275.1	EST_HUMAN	ILD-CT0031-221099-113-e04 CT0031 Homo sapiens cDNA
6270	19043	32020	1.54	1.2E-01	M26925.1	NT	Mouse galactoseyltransferase mRNA, complete cds
6337	19107	32097	0.57	1.2E-01	AA747535.1	EST_HUMAN	nc65c01.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1269024 3'
6550	19315	32321	1.14	1.2E-01	BF347885.1	EST_HUMAN	602023112F1 NCI_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4156386 5'
6700	19616	32668	0.59	1.2E-01	AF295739.1	NT	JC virus agnoprotein, VP2, VP3, VP1, large T antigen, and small t antigen genes, complete cds
7793	20488		1.4	1.2E-01	BE007072.1	EST_HUMAN	PM3-BN0137-290300-002-009 BN0137 Homo sapiens cDNA
7862	20557	33683	4.36	1.2E-01	AI013753.1	EST_HUMAN	wc99g03.x1 NCI_CGAP_Cx3 Homo sapiens cDNA clone IMAGE:2326804 3' similar to SW:GST2_HUMAN
7906	20601	33731	0.67	1.2E-01	Q02369	SWISSPROT	Q90735 MICROSOMAL GLUTATHIONE S-TRANSFERASE II
8208	20602	34037	0.73	1.2E-01	AI632681.1	EST_HUMAN	NADH-UBIQUINONE OXIDOREDUCTASE B22 SUBUNIT (COMPLEX I-B22) (Cl-B22)
8295	20669		10.29	1.2E-01	AW063852.1	EST_HUMAN	a71b10.x1 Bershad codon HPLRB7 Homo sapiens cDNA clone IMAGE:2377435 3'
							xp-0007.x1 NCI_CGAP_Eco2 Homo sapiens cDNA clone IMAGE:2587597 3' similar to gb:M13452 LAMIN A (HUMAN);
8315	21008		3.34	1.2E-01	AF063772.1	NT	Staphylococcus aureus plasmid pSK23 putative recombinase Sin (sin) gene, partial cds; and transcriptional regulator QacR (qacR) and multidrug efflux protein QacB (qacB) genes, complete cds
8354	21047	34184	0.99	1.2E-01	J03956.1	NT	N. crassa vacuolar ATPase 57-Kd subunit (vma-2) gene, complete cds
8354	21047	34185	0.99	1.2E-01	J03956.1	NT	N. crassa vacuolar ATPase 57-Kd subunit (vma-2) gene, complete cds
8469	21191		1.09	1.2E-01	AJ271736.1	NT	Homo sapiens Xq pseudautosomal region; segment 2/2
8589	21281		1.49	1.2E-01	U32714.1	NT	Haemophilus influenzae Rd section 29 of 163 of the complete genome

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8623	21316		0.62	1.2E-01	X15191.1	NT	M.musculus DNA fragment of Apolipoprotein B gene
9471	22090	35252	2.93	1.2E-01	X77981.1	NT	S.cerevisiae HXT5 gene
9906	22555	35750	1.59	1.2E-01	AV710857.1	EST_HUMAN	AV710857 Cu Homo sapiens cDNA clone CUAKE08 5'
10811	23305	36543	1.38	1.2E-01	BF314481.1	EST_HUMAN	601900763F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4130103 5'
10901	23484		2.17	1.2E-01	D26184.1	NT	Yeast MPT6 gene for suppressor protein, complete cds
10989	23672		3.18	1.2E-01	BE962324.2	EST_HUMAN	60185578R1 NIH_MGC_85 Homo sapiens cDNA clone IMAGE:3846283 3'
11094	23784		1.58	1.2E-01	BF314481.1	EST_HUMAN	601900763F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4130103 5'
11220	23883	37168	2.61	1.2E-01	AF190493.1	NT	Homo sapiens dynein intermediate chain DNA11 (DNAI1) gene, exon 17
11283	23944	37238	1.65	1.2E-01	R40249.1	EST_HUMAN	Y80002.s1 Soares Infant brain 1NIB Homo sapiens cDNA clone IMAGE:28880 3'
11492	24093		1.67	1.2E-01	M65109.1	NT	Rabbit glycogen-associated protein phosphatase regulatory subunit (RG1) mRNA, complete cds
11882	24482		2.53	1.2E-01	AV658033.1	EST_HUMAN	AV658033 GLC Homo sapiens cDNA clone GLCF1B12 3'
12230	24683		3.52	1.2E-01	AJ271736.1	NT	Homo sapiens Xq pseudautosomal region; segment 2/2
12905	25351	30805	2.87	1.2E-01	Q04812	SWISSPROT	MACROPHAGE-STIMULATING PROTEIN RECEPTOR PRECURSOR (MSP RECEPTOR) (P185-RON) (CDW138) (CD138 ANTIGEN)
12417	24796		3.16	1.2E-01	AF18892.1	NT	Drosophila melanogaster strain Oregon R potential RNA-binding protein gene, complete cds; and syntactin gene, partial cds
12419	13317		3.19	1.2E-01	AF039442.1	NT	Homo sapiens colon cancer antigen NY-CO-45 mRNA, partial cds
12525	24872		2.11	1.2E-01	X53981.1	NT	R.norvegicus NF68 gene for 68kDa neurofilament
12586	25364	30811	1.44	1.2E-01	BE061418.1	EST_HUMAN	QV4-BT0234-111199-031-g10 BT0234 Homo sapiens cDNA
12610	24917	31007	5.88	1.2E-01	AJ269603.1	EST_HUMAN	gn20g05.x1 NCI_CGAP_Lu6 Homo sapiens cDNA clone IMAGE:1898840 3'
12832	24932		2.83	1.2E-01	L10187.1	NT	Xenopus laevis integrin alpha 3 subunit mRNA, partial cds
12838	25288		7.95	1.2E-01	O98433	SWISSPROT	CYCLIN T
12863	24982	30989	1.39	1.2E-01	AE004428.1	NT	Vibrio cholerae chromosome II, section 85 of the complete chromosome
12800	16228		1.81	1.2E-01	Z89118.1	NT	Bacillus subtilis complete genome (section 15 of 21): from 2765131 to 3013540
12812	25372	30614	1.38	1.2E-01	9845282	NT	Mus musculus protein (18kDa) similar to human SYK interacting protein (p18K), mRNA
551	13334	25064	0.8	1.1E-01	AI581003.1	EST_HUMAN	tr18d08.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2167983 3'
601	13379	28010	1.65	1.1E-01	AA588006.1	EST_HUMAN	nm08g11.s1 NCI_CGAP_Cot10 Homo sapiens cDNA clone IMAGE:1059020 3' similar to gb.X06985_mn1
1032	13792	28452	2.03	1.1E-01	BF697308.1	EST_HUMAN	HEME OXYGENASE 1 (HUMAN);
1063	13821		1.3	1.1E-01	AL161560.2	NT	602128847F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:4286771 5'
1136	15561	26552	4.62	1.1E-01	AW972158.1	EST_HUMAN	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 80
1227	13977	28948	3.01	1.1E-01	D84004.1	NT	EST384142 MAGE resequences, MAGL Homo sapiens cDNA
1511	14257	28943	2.52	1.1E-01	AU140363.1	EST_HUMAN	Synechocystis sp. PCC6803 complete genome, 23/27, 2888767-3002985
2312	15037		1.85	1.1E-01	6755215	NT	AU140363 PLACE2 Homo sapiens cDNA clone PLACE2000403 5'
							Mus musculus pre T-cell antigen receptor alpha (Pctra), mRNA

Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2540	15530		1	1.1E-01	6679676	NT	Rattus norvegicus Procollagen II alpha 1 (Col2a1), mRNA
2572	15286		1.17	1.1E-01	AW821909.1	EST_HUMAN	RCO-ST0379-210100-032-g04 ST0379 Homo sapiens cDNA
3030	15796	28442	0.82	1.1E-01	F03266.1	EST_HUMAN	HSC1RF022 normalized infant brain cDNA Homo sapiens cDNA clone c-1rf02 3'
3336	16096		1.76	1.1E-01	6753231	NT	Mus musculus calcium channel, voltage-dependent, T type, alpha 1G subunit (Ca <sub>v</sub> 1g), mRNA
3415	16173	28822	2.11	1.1E-01	BE393186.1	EST_HUMAN	601308679F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3627066 5'
3444	16200	28850	1.21	1.1E-01	X62135.1	NT	C.reinhardtii nuclear gene on linkage group XIX
3570	16325	28672	0.77	1.1E-01	Y07695.1	NT	A.limnerus gene for transposase
3688	16441		0.74	1.1E-01	P97384	SWISSPROT	ANNEXIN XI (CALCYCLIN-ASSOCIATED ANNEXIN 50) (CAP-50)
3696	16450	29089	1.47	1.1E-01	X52708.1	NT	G.gallus gene encoding non-histone chromosomal protein HMG-14b, exons 4 and 5
4080	16833	29456	1.28	1.1E-01	AW819412.1	EST_HUMAN	MR3-ST0280-280100-025-g07 ST0280 Homo sapiens cDNA
4090	16833	29457	1.28	1.1E-01	AW819412.1	EST_HUMAN	MR3-ST0280-280100-025-g07 ST0280 Homo sapiens cDNA
4226	16967		8.78	1.1E-01	AF157066.1	NT	Drosophila melanogaster kinsicht protein (klar) mRNA, complete cds
4254	16995	29624	0.77	1.1E-01	AW802056.1	EST_HUMAN	IL5-UM0070-020500-068-e08 UM0070 Homo sapiens cDNA
4594	17329	29056	0.96	1.1E-01	S44957.1	NT	Tapa-1=Integral membrane protein TAPA-1 [rice, B cell lymphoma line 38C13, Genomic, 1973 nt, segment 1 of 7]
4780	17512	30134	1.2	1.1E-01	Y07695.1	NT	A.limnerus gene for transposase
4957	18839		0.85	1.1E-01	AF030001.1	NT	Mus musculus major histocompatibility locus class II region:butyrophilin-like protein gene, partial cds; Notch4, PEB2, RAGE, lysophospholipid acid acyl transferase-alpha, palmitoyl-protein thioesterase 2 (PPT2), CREB-IP, and lasechin X (TNX) genes, complete>
5077	17796	30412	1	1.1E-01	PT0261	SWISSPROT	SYNAPTOMAL COMPLEX PROTEIN 3 (SCP-3 PROTEIN)
5584	18381		1.4	1.1E-01	AA747216.1	EST_HUMAN	nc76803.s1 NCL_CGAP_Ewt1 Homo sapiens cDNA clone IMAGE:1268140 similar to contains Alu repetitive element; contains element MER35 repetitive element;
5653	18448	31361	1.23	1.1E-01	AF020627.1	NT	6 Homo sapiens diacylglycerol kinase 3 (DAGK3) gene, exon 6
5687	18480	31399	0.58	1.1E-01	AL110685.1	NT	Bovis chirensis strain T4 cDNA library under conditions of nitrogen deprivation
5745	18537	31459	1.81	1.1E-01	X68851.1	NT	S.pombe ste8 gene encoding protein kinase
5781	18572	31500	5.31	1.1E-01	MB8533.1	NT	Providencia rettgeri penicillin G amidase gene
5836	18718	31676	1.67	1.1E-01	AJ007873.1	NT	Homo sapiens LGMD2B gene
5955	18737	31686	1.75	1.1E-01	BE769152.1	EST_HUMAN	PM3-FT0024-130600-004-f12 FT0024 Homo sapiens cDNA
5976	18757	31719	9.4	1.1E-01	AW853699.1	EST_HUMAN	RC3-CT0254-280999-011-e01 CT0254 Homo sapiens cDNA
6330	19100	32088	0.67	1.1E-01	AL163282.2	NT	Homo sapiens chromosome 21 segment HS21C082
6338	19108	32098	1.25	1.1E-01	AF035746.1	EST_HUMAN	AF035746 Human salivary gland cell line HSG Homo sapiens cDNA clone RL43
6381	19150	32149	0.72	1.1E-01	AI216307.1	EST_HUMAN	qg76d06.x1 Soerea_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1841069 3'
6512	19277	32278	3.71	1.1E-01	O98935	SWISSPROT	ACETYL-COENZYM A SYNTHETASE (ACETATE--COA LIGASE) (ACYL-ACTIVATING ENZYME)
6604	19367		3.03	1.1E-01	AF032922.1	NT	Homo sapiens syntrophin 4 binding protein UNC-18c (UNC-18c) mRNA, complete cds



Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6897	19814	32865	2.81	1.1E-01	11432372	NT	Homo sapiens phosphatidylinositol glycan, class B (PIGB), mRNA
6948	19430	32445	0.7	1.1E-01	AE002155.1	NT	Ureaplasma urealyticum section 56 of 59 of the complete genome
6948	19430	32446	0.7	1.1E-01	AE002155.1	NT	Ureaplasma urealyticum section 56 of 59 of the complete genome
7087	25423		0.89	1.1E-01	BF382758.1	EST_HUMAN	601816624F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:406063 5'
7203	25107	32884	0.84	1.1E-01	AP000006.1	NT	Pyrococcus horikoshii OT3 genomic DNA, 1165001-1485000 nt. position (877)
7435	20112	33199	7.16	1.1E-01	BF684628.1	EST_HUMAN	602140976F1 NIH_MGC_48 Homo sapiens cDNA clone IMAGE:4302019 5'
7435	20112	33200	7.16	1.1E-01	BF684628.1	EST_HUMAN	602140976F1 NIH_MGC_48 Homo sapiens cDNA clone IMAGE:4302019 5'
7555	20225	33329	1.93	1.1E-01	P41067	SWISSPROT	TRAB PROTEIN
7696	20263	33371	3.35	1.1E-01	AA788784.1	EST_HUMAN	ah31b03.s1 Soares_papillary_tumor_NbHPA Homo sapiens cDNA clone 1240403 3' similar to gb:J03483
7868	20563	33680	0.5	1.1E-01	U67492.1	NT	CHROMOGRAFIN A PRECURSOR (HUMAN);
8107	20801	33633	1.7	1.1E-01	AA493574.1	EST_HUMAN	Methanococcus jannaschii section 34 of 150 of the complete genome
8107	20801	33634	1.7	1.1E-01	AA493574.1	EST_HUMAN	nh04g10.s1 NC1_CGAP_Thyl1 Homo sapiens cDNA clone IMAGE:943362
8153	20847	33979	1.15	1.1E-01	X91233.1	NT	nh04g10.s1 NC1_CGAP_Thyl1 Homo sapiens cDNA clone IMAGE:943362
8193	20887		1.14	1.1E-01	AW817918.1	EST_HUMAN	H. sapiens IL15 gene
8249	20943	34081	1.45	1.1E-01	AL134349.1	EST_HUMAN	PM1-ST0270-080200-001-409 ST0270 Homo sapiens cDNA
8717	21409	34552	2.08	1.1E-01	U02482.1	NT	DKFZp547P194_11 547 (synonym: hfb1) Homo sapiens cDNA clone DKFZp547P194 5'
8810	21502	34849	0.86	1.1E-01	A1807474.1	EST_HUMAN	Pedillococcus acclimated H plasmid pSMB74 pediocin Acl production (pap) gene cluster papA, papB, papC and papD genes, complete cds
8906	21597	34739	0.47	1.1E-01	AF050081.1	NT	wf48c01.x1 Soares_NF1_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2358816 3' similar to contains Alu repetitive element
8941	21632	34775	2.04	1.1E-01	AA192153.1	EST_HUMAN	Homo sapiens C16orf5 large protein mRNA, complete cds
8941	21632	34776	2.04	1.1E-01	AA192153.1	EST_HUMAN	zp63b12.f1 Stratis gene muscle 537209 Homo sapiens cDNA clone IMAGE:627743 5'
9033	21723	34877	0.74	1.1E-01	Y12727.1	NT	zp63b12.f1 Stratis gene muscle 537209 Homo sapiens cDNA clone IMAGE:627743 5'
9063	21752	34912	2.04	1.1E-01	T72875.1	EST_HUMAN	P. furiosus partial cph5 gene and argF gene
9090	21779		0.6	1.1E-01	BE983200.1	EST_HUMAN	yc19h03.s1 Soares fetal liver spleen 1NFUS Homo sapiens cDNA clone IMAGE:108725 3' similar to gb:M81181 SODIUMPOTASSIUM-TRANSPORTING ATPASE BETA-2 (HUMAN);
9322	21989		0.88	1.1E-01	BE142305.1	EST_HUMAN	601436872F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3922048 5'
9398	22058		2	1.1E-01	BF085149.1	EST_HUMAN	CM3-H10142-271089-028-g11 HT0142 Homo sapiens cDNA
9810	22481		0.5	1.1E-01	AL161543.2	NT	MR2-GN0027-040900-005-e08 GN0027 Homo sapiens cDNA
10017	22865		0.45	1.1E-01	BE315509.1	EST_HUMAN	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 43
10106	22764		1.57	1.1E-01	R80590.1	EST_HUMAN	601140231F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3049543 5'
10235	22883	36098	1.28	1.1E-01	U00529.1	NT	y08a09.s1 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:147064 3'
10708	15796	28442	2.05	1.1E-01	F03265.1	EST_HUMAN	Ceratitis capitata yoyo retrotransposon gag-like, pol-like and env-like genes, complete cds
							HSC1RF022 normalized infant brain cDNA Homo sapiens cDNA clone c-1rf02 3'

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10840	23622		2.75	1.1E-01	AF169032.1	NT	Caressius auratus actin beta A precursor, mRNA, complete cds
10874	23650			1.1E-01	R23708.1	EST_HUMAN	yf39f12.1 Soares placenta NB21-P Homo sapiens cDNA clone IMAGE:131759 5' similar to contains Alu repetitive element/contains TAR1 repetitive element ;
10983	23658	36903	3.91	1.1E-01	8681351	NT	Rattus norvegicus Phosphofructokinase, liver, B-type (Pfk), mRNA
11002	16480	31399	1.31	1.1E-01	AL110985.1	NT	Bolovitis cinerea strain T4 cDNA library under conditions of nitrogen deprivation
11134	23802	37079	1.58	1.1E-01	X70058.1	NT	M.musculus cytochrome gene
11168	23838	37117	3.21	1.1E-01	Z11910.1	NT	Z.mobilis lgt and lgt genes encoding fRNA guanine transglycosylase and DNA ligase
11198	23838	37118	3.21	1.1E-01	Z11910.1	NT	Z.mobilis lgt and lgt genes encoding fRNA guanine transglycosylase and DNA ligase
11277	23938	37230	2.81	1.1E-01	P17437	SWISSPROT	SKIN SECRETORY PROTEIN XP2 PRECURSOR (APEG PROTEIN)
11674	24269		1.95	1.1E-01	AL161511.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 23
11990	24529		1.96	1.1E-01	AA192153.1	EST_HUMAN	zp93b12.11 Strategene muscle 937209 Homo sapiens cDNA clone IMAGE:827743 5'
12098	24598		3.92	1.1E-01	BE767023.1	EST_HUMAN	RC2-NT0112-120600-014-403 NT0112 Homo sapiens cDNA
12341	25160		1.97	1.1E-01	BE974558.1	EST_HUMAN	601680551R2 NIH_MGC 83 Homo sapiens cDNA clone IMAGE:3950804 3'
12760	25012	30977	3.15	1.1E-01	BF239753.1	EST_HUMAN	601680550F1 NIH_MGC_54 Homo sapiens cDNA clone IMAGE:4134085 5'
1179	13932		2.74	1.0E-01	O62855	SWISSPROT	DEOXYRIBONUCLEASE II PRECURSOR (DNASE II) (ACID DNASE) (LYSOSOMAL DNASE II)
							ws08401.x1 NCI_CGAP_Kd111 Homo sapiens cDNA clone IMAGE:2495577 3' similar to contains MIER7.13
1249	13998	26666	2.63	1.0E-01	AJ985499.1	EST_HUMAN	MER7 repetitive element ;
1371	14119	26794	1.95	1.0E-01	AL161504.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 16
2493	15210	27952	1.11	1.0E-01	AW451365.1	EST_HUMAN	UI-H-BIS-alc-d-07-Q-UJ.s1 NCI_CGAP_Sub5 Homo sapiens cDNA clone IMAGE:2738420 3'
3503	16259	28913	1.19	1.0E-01	BF033991.1	EST_HUMAN	6014565301F1 NIH_MGC_86 Homo sapiens cDNA clone IMAGE:3858849 5'
3708	16461	29100	1.03	1.0E-01	BF239618.1	EST_HUMAN	601680489F1 NIH_MGC_54 Homo sapiens cDNA clone IMAGE:4134071 5'
3817	16569	29200	0.98	1.0E-01	AF297061.1	NT	Escherichia coli enterotoxin EspC (espC) gene, complete cds; and unknown genes
3817	16569	29201	0.98	1.0E-01	AF297061.1	NT	Escherichia coli enterotoxin EspC (espC) gene, complete cds; and unknown genes
3935	16685	29326	2.53	1.0E-01	BF365703.1	EST_HUMAN	QV2-NT0048-160800-318-e05 NT0048 Homo sapiens cDNA
4518	17253		0.95	1.0E-01	AJ792349.1	EST_HUMAN	an32004.y5 Gessler Wilms tumor Homo sapiens cDNA clone IMAGE:1700358 5'
4694	17398	30032	1.19	1.0E-01	U50450.1	NT	Drosophila melanogaster tyrosine kinase p45 laciform (lar) mRNA, complete cds
4906	17594	30217	2.35	1.0E-01	AW952344.1	EST_HUMAN	EST384414 IMAGE resequences, MAGB Homo sapiens cDNA
5238	18044		9.73	1.0E-01	W86490.1	EST_HUMAN	zh62h04.s1 Soares fetal liver_spleen_INFLS_S1 Homo sapiens cDNA clone IMAGE:416695 3'
5789	18580		1.21	1.0E-01	AK024472.1	NT	Homo sapiens mRNA for FLJ00065 protein, partial cds
5834	18717	31675	14.15	1.0E-01	AF274875.1	NT	Homo sapiens growth factor receptor-bound protein 7 (GRB7) gene, complete cds
6243	19017	31991	0.99	1.0E-01	AA481879.1	EST_HUMAN	zv41g10.a1 Soares ovary tumor NBHOT Homo sapiens cDNA clone IMAGE:756258 3' similar to contains
6256	19030	32005	0.7	1.0E-01	AA406039.1	EST_HUMAN	zv67c12.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:743082 3'

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6824	19680		1.81	1.0E-01	R23821.1	EST_HUMAN	y34406.r1 Soares placenta Nb2-IP Homo sapiens cDNA clone IMAGE:131675 5' similar to contains Alu repetitive element;
7635	20300		2.87	1.0E-01	Y12488.1	NT	Mimusculus vln gene
7709	20373	33486	0.65	1.0E-01	AJ011400.1	NT	Bos taurus mRNA for b17.2 subunit of NADH:ubiquinone oxidoreductase complex (complex I)
7709	20373	33487	0.65	1.0E-01	AJ011400.1	NT	Bos taurus mRNA for b17.2 subunit of NADH:ubiquinone oxidoreductase complex (complex I)
7834	20520	33656	0.65	1.0E-01	AA861001.1	EST_HUMAN	ak32q01.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1407896 3' similar to gb:M34182 CAMP-DEPENDENT PROTEIN KINASE, GAMMA-CATALYTIC SUBUNIT (HUMAN);
8068	20780		0.6	1.0E-01	4758395	NT	Homo sapiens fibroblast growth factor 13 (FGF13) mRNA
8390	21083		0.96	1.0E-01	AW189797.1	EST_HUMAN	x09601.x1 NCI_CGAP_U4 Homo sapiens cDNA clone IMAGE:2675689 3' similar to gb:X17206 40S RIBOSOMAL PROTEIN S4 (HUMAN); contains TAR1.3 TAR1 repetitive element;
9084	21773	34937	1.04	1.0E-01	AF102856.2	NT	Rattus norvegicus synaptic SAPAP-interacting protein Synapton mRNA, complete cds
9396	22057	35228	0.51	1.0E-01	R44893.1	EST_HUMAN	y53304.s1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:34549 3'
9407	22089		1.6	1.0E-01	M78729.1	NT	Human pro-alpha-1 (V) collagen mRNA, complete cds
9450	22000		3.02	1.0E-01	AE001501.1	NT	Helicobacter pylori, strain J99 section 62 of 132 of the complete genome
9484	22074	35245	0.75	1.0E-01	W01955.1	EST_HUMAN	zz68c10.s1 Soares fetal heart NB1#119W Homo sapiens cDNA clone IMAGE:327282 3'
9721	22372	35571	1.67	1.0E-01	BF240154.1	EST_HUMAN	60190586F1 NIH_MGC_54 Homo sapiens cDNA clone IMAGE:4133487 5'
9835	22486	35687	8.12	1.0E-01	AB046799.1	NT	Homo sapiens mRNA for KIAA1579 protein, partial cds
9835	22486	35688	8.12	1.0E-01	AB046799.1	NT	Homo sapiens mRNA for KIAA1579 protein, partial cds
10043	22691		0.97	1.0E-01	AW957425.1	EST_HUMAN	EST369615 IMAGE resequences, IMAGE Homo sapiens cDNA
10048	22696	35912	0.51	1.0E-01	T51952.1	EST_HUMAN	y029a06.s1 Strategene fetal spleen (#837205) Homo sapiens cDNA clone IMAGE:72562 3' similar to contains Alu repetitive element
10229	22877	36089	0.89	1.0E-01	BE782750.1	EST_HUMAN	601584604F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3939086 5'
10554	23250		1.95	1.0E-01	AU159127.1	EST_HUMAN	AU159127 THYRO1 Homo sapiens cDNA clone THYRO1000895 3'
10958	23634	36884	2.35	1.0E-01	BF242946.1	EST_HUMAN	601877703F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:4106089 5'
10958	23634	36885	2.35	1.0E-01	BF242946.1	EST_HUMAN	601877703F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:4106089 5'
11376	23083	37283	6.22	1.0E-01	BE790543.1	EST_HUMAN	601582558F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3936734 5'
11510	24110		1.82	1.0E-01	AP000400.1	NT	Escherichia coli O157:H7 genomic DNA, prophage (Salv1-VT1) inserted region, substrain:RIMD 0508952
11594	24193	37511	1.46	1.0E-01	Z71446.1	NT	A.thaliana mRNA for GLC-b chloride channel protein
11594	24193	37512	1.46	1.0E-01	Z71446.1	NT	A.thaliana mRNA for GLC-b chloride channel protein
11832	24410	37755	1.89	1.0E-01	AV649035.1	EST_HUMAN	AV649035 GLC Homo sapiens cDNA clone GLCBPG01 3'
11832	24410	37756	1.89	1.0E-01	AV649035.1	EST_HUMAN	AV649035 GLC Homo sapiens cDNA clone GLCBPG01 3'
12083	24921		4.32	1.0E-01	BE637719.1	EST_HUMAN	601085554F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3461833 5'
12300	24725		1.71	1.0E-01	7862165	NT	Homo sapiens KIAA0514 gene product (KIAA0514), mRNA

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12317	24738		2.22	1.0E-01	X00854.1	NT	Drosophila melanogaster ftz gene
12614	24921		2.74	1.0E-01	BE537719.1	EST_HUMAN	801095554F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3451933 5'
12677	25318		5.83	1.0E-01	U68834.1	NT	Saccharomyces cerevisiae suppressor of ABF1 (SAB2) gene, complete cds
12733	25002		8.8	1.0E-01	AF001507.1	NT	Bacillus halodurans genomic DNA, section 1/14
2781	15486	28224	1.27	9.9E-02	AF274008.1	NT	Drosophila melanogaster cAMP-dependent protein kinase type II regulatory subunit (pka-R11) mRNA, complete cds
2780	15495	28235	1.53	9.8E-02	BE545554.1	EST_HUMAN	801070219F1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3456365 5'
2790	15495	28236	1.53	9.8E-02	BE545554.1	EST_HUMAN	801070219F1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3456365 5'
3260	16022	28871	1.32	9.9E-02	AF09810.1	NT	Homo sapiens neurodin III-alpha gene, partial cds
3833	16883	28324	0.75	9.9E-02	A1821637.1	EST_HUMAN	zu46c03.x5 Soares ovary tumor NbHOT Homo sapiens cDNA clone IMAGE:740932 3'
4632	17387	30003	0.93	9.9E-02	BE674249.1	EST_HUMAN	7d77c12.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3278998 3'
6875	17951	30547	9.17	9.9E-02	D83710.1	NT	Aspergillus terreus BSD mRNA for blastidin S deaminase, complete cds
7815	20510	33634	0.93	9.9E-02	AW103088.1	EST_HUMAN	x043c09.x1 NCI_CGAP_Ov23 Homo sapiens cDNA clone IMAGE:2596528 3' similar to contains Alu repetitive element; contains element MIR MIR repetitive element ;
7815	20510	33635	0.93	9.9E-02	AW103088.1	EST_HUMAN	x043c09.x1 NCI_CGAP_Ov23 Homo sapiens cDNA clone IMAGE:2596528 3' similar to contains Alu repetitive element; contains element MIR MIR repetitive element ;
9156	21887	35055	0.98	9.9E-02	X58338.1	NT	Mus musculus phospholipid transfer protein (Pltp), mRNA
550	13333		1.43	9.8E-02	X58338.1	NT	O. sativa RAmY3C gene for alpha-amylase
3100	15865		0.9	9.8E-02	4504578	NT	Homo sapiens I factor (complement) (IF) mRNA
3142	15906	28550	3.84	9.8E-02	AF184274.1	NT	Daucus carota leucoanthocyanidin dioxygenase 2 (LDOX) mRNA, LDOX-2 allele, complete cds
4198	16839	29564	6.24	9.8E-02	AF257328.1	NT	Leptospira maculans beta-tubulin mRNA, complete cds
4198	16839	29565	6.24	9.8E-02	AF257329.1	NT	Leptospira maculans beta-tubulin mRNA, complete cds
7381	20061		0.77	9.8E-02	X54133.1	NT	Human HPTP delta mRNA for protein tyrosine phosphatase delta
9153	21884		1.18	9.8E-02	M01943.1	NT	Human laminin B1 chain gene, exon 28
11437	23204	38436	2.05	9.8E-02	BF037421.1	EST_HUMAN	801480793F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3884287 5'
12052	24570		1.78	9.8E-02	8383751	NT	Rattus norvegicus microtubule-associated protein tau (Mapt), mRNA
1328	14077	26752	1.31	9.7E-02	AB005806.1	NT	Aloe arborescens mRNA for NADP-malic enzyme, complete cds
1580	14328		1.49	9.7E-02	4503710	NT	Homo sapiens fibroblast growth factor receptor 3 (echondroplasia, thanatophoric dwarfism) (FGFR3) mRNA
2257	14984	27724	2.08	9.7E-02	BE108660.1	EST_HUMAN	QV1-HT0516-070300-065-404 HT0516 Homo sapiens cDNA
3965	16714		3.48	9.7E-02	Q89795	SWISSPROT	CELL SURFACE A33 ANTIGEN PRECURSOR (GLYCOPROTEIN A33)
5261	18067	30695	0.94	9.7E-02	AF099189.1	NT	Caulobacter crescentus thymidylate kinase (tnk) and DNA polymerase III delta prime subunit (dnaC) genes, complete cds

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5261	18067	30596	0.94	9.7E-02	AF080188.1	NT	Caulobacter crescentius thymidylate kinase (tnk) and DNA polymerase III delta prime subunit (dnaC) genes, complete cds
5624	18708	31882	1.43	9.7E-02	AW954478.1	EST_HUMAN	EST366546 MAGE resequences, MAGE Homo sapiens cDNA
7198	19884	32958	3.24	9.7E-02	Z99119.1	NT	Bacillus subtilis complete genome (section 18 of 21); from 2897771 to 3213410
7882	20577	33705	1.28	9.7E-02	N22798.1	EST_HUMAN	yw41c03.s1 Weizmann Offactory Epithelium Homo sapiens cDNA clone IMAGE:254788.3
7882	20577	33706	1.28	9.7E-02	N22798.1	EST_HUMAN	yw41c03.s1 Weizmann Offactory Epithelium Homo sapiens cDNA clone IMAGE:254788.3
8748	21440	34587	1.49	9.7E-02	AI863984.1	EST_HUMAN	wx78b06.x1 NCI CGAP_Ox38 Homo sapiens cDNA clone IMAGE:2549747.3 similar to gb:X52851_mn1
11152	23819		2.84	9.7E-02	U58337.1	NT	PEPTIDYL-PROLYL CIS-TRANS ISOMERASE A (HUMAN);
2009	14744	27470	1.11	9.6E-02	AI80721.1	EST_HUMAN	Mus musculus Igk1n (Lgk1) mRNA, partial cds
2009	14744	27471	1.11	9.6E-02	AI80721.1	EST_HUMAN	oz47d11.x1 Soares NIH-MFPU_S1 Homo sapiens cDNA clone IMAGE:1678485.3
4311	17050	29675	5.8	9.6E-02	Z32686.2	NT	oz47d11.x1 Soares NIH-MFPU_S1 Homo sapiens cDNA clone IMAGE:1678485.3
4940	17968	30276	0.99	9.6E-02	AW966230.1	EST_HUMAN	Proteus mirabilis fibrinolytic operon, strain HI4320
8014	18795		3.13	9.6E-02	BE910039.1	EST_HUMAN	EST378303 MAGE resequences, MAGE Homo sapiens cDNA
8274	20888		0.8	9.6E-02	AI137084.1	EST_HUMAN	60149088F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3900165.5
9444	22121	35300	1.31	9.6E-02	AV687898.1	EST_HUMAN	AU137084 PLACE1 Homo sapiens cDNA clone IMAGE:1005740.5
9772	22423		1.12	9.6E-02	BE694895.1	EST_HUMAN	AV687898 GKC Homo sapiens cDNA clone GKCAAH02.5
9839	22587	35790	1.29	9.6E-02	AJ243211.1	NT	601434080F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3919363.5
9839	22587	35791	1.29	9.6E-02	AJ243211.1	NT	Homo sapiens DMBT1 candidate tumour suppressor gene, exons 1 to 55
10020	22668	35984	0.5	9.6E-02	BF677270.1	EST_HUMAN	Homo sapiens DMBT1 candidate tumour suppressor gene, exons 1 to 55
10051	22669	35915	1.54	9.6E-02	AB013985.1	NT	602086789F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4250989.5
10051	22669	35916	1.54	9.6E-02	AB013985.1	NT	Antirrhinum majus transposon Tarn3 pseudogene for transposase (in S-5 copy)
10158	22806	36024	3.35	9.6E-02	P08174	SWISSPROT	Antirrhinum majus transposon Tarn3 pseudogene for transposase (in S-5 copy)
10643	23334	36572	7.22	9.6E-02	Z79702.1	NT	COMPLEMENT DECAY-ACCELERATING FACTOR PRECURSOR (CD55)
12652	24954		3.34	9.6E-02	H14590.1	EST_HUMAN	Mycobacterium tuberculosis H37Rv complete genome, segment 102/162
4081	16825	29452	2.1	9.5E-02	AW982395.1	EST_HUMAN	ym19h03.s1 Soares Infant brain 1N1B Homo sapiens cDNA clone IMAGE:48653.3
5579	18376	31289	0.65	9.5E-02	P51854	SWISSPROT	GM2-BN0023-050200-087-f12 BN0023 Homo sapiens cDNA
6988	19881	32729	0.55	9.5E-02	AA780728.1	EST_HUMAN	TRANSKETOLASE 2 (TK 2) (TRANSKETOLASE RELATED PROTEIN)
7202	19888	32863	4.72	9.5E-02	AB003473.1	NT	ac88a09.s1 Stratagene fetal retina 937202 Homo sapiens cDNA clone IMAGE:867736.3
7467	20141	33234	7.68	9.5E-02	AL161538.2	NT	Trimercurus flavoviridis DNA for phospholipase A2 inhibitor, complete cds
7597	18378	31289	0.84	9.5E-02	P51854	SWISSPROT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 38
7780	20475	33600	1.83	9.5E-02	BF036861.1	EST_HUMAN	TRANSKETOLASE 2 (TK 2) (TRANSKETOLASE RELATED PROTEIN)
7780	20475	33601	1.83	9.5E-02	BF036861.1	EST_HUMAN	601453642F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3857243.5
10578	23273	36509	2.36	9.5E-02	BF036861.1	EST_HUMAN	601453642F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3857243.5

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10578	23273	36510	2.36	9.5E-02	BF035861.1	EST_HUMAN	601463642F1 NIH_MGC_86 Homo sapiens cDNA clone IMAGE:3857243 5'
1826	14594	27275	2.82	9.4E-02	BF071063.1	EST_HUMAN	602150882F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4291917 5'
1857	14595	27310	0.99	9.4E-02	U55944.1	NT	Cavia porcellus 3beta-hydroxysteroid sulfotransferase mRNA, complete cds
1857	14595	27311	0.99	9.4E-02	U55944.1	NT	Cavia porcellus 3beta-hydroxysteroid sulfotransferase mRNA, complete cds
3860	16810	29249	4.43	9.4E-02	Z33059.1	NT	M. capricolum DNA for CONTIG MC073
6225	18999	31976	0.63	9.4E-02	AF097983.1	NT	Triticum aestivum heat shock protein 101 (Hsp101a) mRNA, complete cds
8498	21190		2.46	9.4E-02	Z46903.1	NT	Acholeplasma sp. cysD, cobQ, sodM, hysS, rubA, rubB, estB, oxyR, ppk, mtaA, ORF2 and ORF3 genes
10851	20106	33258	2.44	9.4E-02	L78833.1	NT	Human BRCA1, Rho7 and vail genes, complete cds, and lpr35 gene, partial cds
11941	25255		1.78	9.4E-02	U31815.1	NT	Rattus norvegicus calcium channel alpha-1C subunit (ROB2) mRNA, partial cds
12671	24965		1.92	9.4E-02	AF198038.1	NT	Mycoplasma pulmonis hypothetical membrane protein P83 gene, complete cds
2968	15764		1.87	9.3E-02	4809280	NT	Homo sapiens BAI1-associated protein 3 (BAIAP3) mRNA
3026	15792		6.32	9.3E-02	6912525	NT	Homo sapiens nasopharyngeal epithelium specific protein 1 (NESG1), mRNA
3251	16013	28665	1.85	9.3E-02	BF575511.1	EST_HUMAN	602133086F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4288280 5'
4132	16874	28502	3.51	9.3E-02	BE391943.1	EST_HUMAN	601286082F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3607653 5'
4132	16874	29503	3.51	9.3E-02	BE391943.1	EST_HUMAN	601286082F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3607653 5'
4685	17419		2.04	9.3E-02	AV732224.1	EST_HUMAN	AV732224 HTF Homo sapiens cDNA clone HTFAUA06 5'
5576	18373		0.67	9.3E-02	AP001807.1	NT	Bacillus halodurans genomic DNA, section 1/14
8146	20840	33972	0.62	9.3E-02	AW56007.1	EST_HUMAN	EST69 Human Fetal Brain MATCHMAKER cDNA Library Homo sapiens cDNA
9810	22263	35449	2.15	9.3E-02	BE962831.2	EST_HUMAN	601655988R1 NIH_MGC_86 Homo sapiens cDNA clone IMAGE:3855981 3'
10091	22739	35953	3.67	9.3E-02	Q16034	SWISSPROT	HYPOTHETICAL PROTEIN KIAA0032
10091	22739	35954	3.67	9.3E-02	Q15034	SWISSPROT	HYPOTHETICAL PROTEIN KIAA0032
10218	22866		3.6	9.3E-02	AW206117.1	EST_HUMAN	U1-H-B11-afk-h-06-Q-U1.s1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2723553 3'
12194	25181		2.51	9.3E-02	AJ249850.1	NT	Photobacterium damselae subsp. damselae partial gyrB gene for DNA gyrase B subunit
12550	25209		8.43	9.3E-02	AW48850.1	EST_HUMAN	hd28h12.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2910887 3'
							Mus musculus major histocompatibility locus class II region; Fas-binding protein Dcox (DAXX) gene, partial cds; B1ng1 (B1NG1), tapasin (tapasin), RalGDS-like factor (RLF), KE2 (KE2), B1NG4 (B1NG4), beta1, 3-galactosyl transferase (beta1,3-galactosyl tr>
12752	25254		2.1	9.3E-02	AF100858.1	NT	galactosyl transferase (beta1,3-galactosyl tr>
222	13034	25668	8.37	9.2E-02	U60315.1	NT	Mollusca contagiosum virus subtype 1, complete genome
222	13034	25669	8.37	9.2E-02	U60315.1	NT	Mollusca contagiosum virus subtype 1, complete genome
222	13034	25670	8.37	9.2E-02	U60315.1	NT	Mollusca contagiosum virus subtype 1, complete genome
2224	14652		1.68	9.2E-02	R54156.1	EST_HUMAN	yg98f07.r1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:41618 5'
3175	15938	28567	3.28	9.2E-02	Q28631	SWISSPROT	MAJOR EPIDIDYMIS-SPECIFIC PROTEIN E4 (EPIDIDYMAL PROTEIN BE-20)
3299	16061	28709	0.65	9.2E-02	AA534354.1	EST_HUMAN	nt79e01.s1 NCI_CGAP_Co3 Homo sapiens cDNA clone IMAGE:928136 3'

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3573	16328		1.28	9.2E-02	8765216	NT	Mus musculus pre T-cell antigen receptor alpha (Ptra), mRNA
4213	16954		0.99	9.2E-02	U92048.1	NT	Human herpesvirus 1 strain KOS-83, latency-associated transcript, promoter region
4274	17013		0.76	9.2E-02	BE299722.1	EST_HUMAN	600944355F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:2960178 5'
7907	20602	33732	1.96	9.2E-02	T46920.1	EST_HUMAN	y98009.r1 Strategene placenta (#637225) Homo sapiens cDNA clone IMAGE:68808 5' similar to similar to gb:X59009 GUANINE NUCLEOTIDE-BINDING PROTEIN G(S), ALPHA SUBUNIT (HUMAN)
8076	20770	33899	2.2	9.2E-02	X95256.1	NT	H. vulgare xylose isomerase gene
11695	24290	37614	1.27	9.2E-02	AF026552.3	NT	Mesocricetus auratus oviductin precursor (OVI) gene, complete cds
12738	25412		1.4	9.2E-02	11466872	NT	Podospora anserina mitochondrion, complete genome
414	12825	25439	4.19	9.1E-02	X77665.1	NT	O. cuniculus K12 keratin gene
4461	17187	29812	1.33	9.1E-02	AL161554.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 54
5943	18438	31352	1.44	9.1E-02	AF129756.1	NT	Homo sapiens MSH55 gene, partial cds; and CLIC1, DDAH, G6b, G6c, G6d, G6e, G6f, BAT5, G6b, CSK2B, BAT4, G4, Apo M, BAT3, BAT2, AIF-1, IC7, LST-1, LTB, TNF, and LTA genes, complete cds
7295	19668	33045	14.94	9.1E-02	AW160658.1	EST_HUMAN	au74605.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2761968 5'
7575	20244	33349	0.79	9.1E-02	AP000081.1	NT	Aeropyrum pernix genomic DNA, section 4/7
7609	20275	33383	0.72	9.1E-02	U36073.1	NT	Mus musculus thymopoietin zeta mRNA, complete cds
8822	21514	34659	0.88	9.1E-02	Y14379.1	NT	Homo sapiens gamma adducin gene, exon 9
10327	22974		1.37	9.1E-02	T02984.1	EST_HUMAN	FB19F10 Fetal brain, Strategene Homo sapiens cDNA clone FB19F10 3' end
10354	23001	36218	1.25	9.1E-02	S74059.1	NT	Tg616=Cyl actin [Tripneustes gratilis=sea urchin, embryos, Genomic, 5275 nt]
10383	23029	36244	1.19	9.1E-02	Y11187.1	NT	A. thaliana RH1, TC1, G14587-5, G14587-6, and PRL1 genes
12110	25348		1.4	9.1E-02	AA179001.1	EST_HUMAN	zp38h12.s1 Strategene muscle 937209 Homo sapiens cDNA clone IMAGE:611783 3' similar to SW:TRT3_HUMAN P45378 TROPONIN T, FAST SKELETAL MUSCLE, ISOFORM BETA ;
12181	24653		2.12	9.1E-02	AF052956.1	NT	Rattus norvegicus cell cycle protein p56CDC gene, complete cds
12637	25204		1.93	9.1E-02	AJ291390.1	NT	Homo sapiens partial MUC3B gene for MUC3B mucin, exons 1-11
727	19501	26155	4.3	9.0E-02	P18328	SWISSPROT	FOLATE RECEPTOR ALPHA PRECURSOR (FR-ALPHA) (FOLATE RECEPTOR 1) (FOLATE RECEPTOR, ADULT) (ADULT FOLATE-BINDING PROTEIN) (FBP) (OVARIAN TUMOR-ASSOCIATED ANTIGEN MOV18) (KB CELLS FBP)
1631	14377	27084	5.28	9.0E-02	BE220482.1	EST_HUMAN	hyc9g10.x1 NCI CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3175842 3' similar to contains Alu repetitive element
2806	15511	28252	6.45	9.0E-02	AF139522.1	NT	HIV-1 p8c095-06 from USA envelope glycoprotein (env) gene, partial cds
2806	15511	28253	6.45	9.0E-02	AF139522.1	NT	HIV-1 p8c095-06 from USA envelope glycoprotein (env) gene, partial cds
3331	16091	28744	0.84	9.0E-02	AF270135.1	NT	Dicotyledonum discoidium spore coat structural protein SP85 (cdE) gene, complete cds
4619	17354	28989	3.27	9.0E-02	X65740.2	NT	Plasmodium falciparum P-type ATPase 3 gene

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5908	18691	31840	5.21	9.0E-02	W56037.1	EST_HUMAN	z888a12.r1 Scores fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:297694 5' similar to PIR:S62171 S52171 small G protein - human;
6810	18381		1.14	9.0E-02	BF062651.1	EST_HUMAN	7h63d03.x1 NCI_CGAP_Cot18 Homo sapiens cDNA clone IMAGE:3320845 3' similar to contains Alu repetitive element;
6868	18586	32819	0.72	9.0E-02	R62805.1	EST_HUMAN	y111508.s1 Scores placental Nb2-IP Homo sapiens cDNA clone IMAGE:138903 3'
12486	24845		2.01	9.0E-02	AF022238.1	NT	Escherichia coli strain E2348/69 pathogenicity island, rOrf1 (orf1), rOrf2 (orf2), EscR (escR), EscS (escS), EscT (escT), EscU (escU), EscD (escD), EscC (escC), EscJ (escJ), SepZ (sepZ), EscV (escV), EscN (escN), SepQ (sepQ), Tr (tr), OrfU (orfU), >
1418	14186	26949	1.99	8.9E-02	BF701593.1	EST_HUMAN	602129030F2 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4285951 5'
1418	14186	26950	1.99	8.9E-02	BF701593.1	EST_HUMAN	602129030F2 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4285951 5'
2386	15107	27848	1.22	8.9E-02	BE153572.1	EST_HUMAN	PM0-HT0339-251189-003-d01 HT0339 Homo sapiens cDNA
4175	16915		1.93	8.9E-02	AF286055.1	NT	Atrichum angustatum AtranFb2 protein (AtranFb2) gene, partial cds
5760	18552	31474	3.22	8.9E-02	AW462122.1	EST_HUMAN	UI-H-B13-alc-f08-0-J1.s1 NCI_CGAP_Sub5 Homo sapiens cDNA clone IMAGE:3088294 3'
5760	18552	31475	3.22	8.9E-02	AW462122.1	EST_HUMAN	UI-H-B13-alc-f08-0-J1.s1 NCI_CGAP_Sub5 Homo sapiens cDNA clone IMAGE:3088294 3'
5776	18597	31496	3.39	8.9E-02	11433478	NT	Homo sapiens similar to endoglycan (H. sapiens) (LOC33107), mRNA
7083	19782	32848	1.64	8.9E-02	P47259	SWISSPROT	FOLD BIFUNCTIONAL PROTEIN [INCLUDES: METHYLENETETRAHYDROFOLATE DEHYDROGENASE; METHENYL TETRAHYDROFOLATE CYCLOHYDROLASE]
7458	20132		2.06	8.9E-02	Z79021.1	NT	H. sapiens flow-sorted chromosome 6 HindIII fragment, SC6pA20F8
7649	20844	33768	1.08	8.9E-02	P28476	SWISSPROT	NITRIC-OXIDE SYNTHASE, BRAIN (NOS, TYPE I) (NEURONAL NOS) (N-NOS) (NNOS)
8030	20725	33858	0.72	8.9E-02	BF701685.1	EST_HUMAN	(CONSTITUTIVE NOS) (NC-NOS) (BNOS)
8030	20725	33859	0.72	8.9E-02	BF701685.1	EST_HUMAN	60212811F2 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4285827 5'
8498	21188	34331	4.72	8.9E-02	AA308319.1	EST_HUMAN	60212811F2 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4285827 5'
9620	22173	35356	0.8	8.9E-02	A1265627.1	EST_HUMAN	EST180187 Liver, hepatocellular carcinoma Homo sapiens cDNA 5' end
9620	22173	35357	0.8	8.9E-02	A1265627.1	EST_HUMAN	qu55c05.x1 NCI_CGAP_Lym8 Homo sapiens cDNA clone IMAGE:1988680 3' similar to contains MER10.b1
9632	22284	35477	0.78	8.9E-02	AA339358.1	EST_HUMAN	MER10 repetitive element;
11882	25173		1.49	8.9E-02	P30143	SWISSPROT	qu55c05.x1 NCI_CGAP_Lym8 Homo sapiens cDNA clone IMAGE:1988680 3' similar to contains MER10.b1
11940	25207		1.48	8.9E-02	P19524	SWISSPROT	MER10 repetitive element;
12085	24591		3.05	8.9E-02	BF686018.1	EST_HUMAN	EST44454 Fetal brain   Homo sapiens cDNA 5' end
12284	24716		1.61	8.9E-02	U29895.1	NT	HYPOTHETICAL 51.7 KD PROTEIN IN THRC-TALB INTERGENIC REGION (ORF8)
1352	14100	26775	1.59	8.9E-02	Q27474	SWISSPROT	MYOSIN-2 ISOFORM
3883	16933	29272	1.03	8.9E-02	AA289128.1	EST_HUMAN	602129882F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4286180 5'



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4014	16760		3.55	8.8E-02	O00268	SWISSPROT	TRANSCRIPTION INITIATION FACTOR TF1D 135 KDA SUBUNIT (TAFII135) (TAFII130)
4214	16955		0.99	8.8E-02	4502804	NT	Homo sapiens chromogranin A (parathyroid secretory protein 1) (CHGA) mRNA
4269	17009		1.27	8.8E-02	4590423	NT	Homo sapiens paired box gene 6 (enriched, keratins) (PAX6), isoform b, mRNA
7444	20120		0.57	8.8E-02	D17520.1	NT	Sheep mRNA for angiotensinogen, complete cds
8888	21577	34719	1.07	8.8E-02	AA151872.1	EST_HUMAN	zr88e05.s1 Stratagene colon (#937204) Homo sapiens cDNA clone IMAGE:586288 3'
11062	23732	37003	2.7	8.8E-02	BE284455.1	EST_HUMAN	601191770F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3535648 5'
11062	23732	37004	2.7	8.8E-02	BE284455.1	EST_HUMAN	601191770F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3535648 5'
11228	23891	37178	6.92	8.8E-02	AL040129.1	EST_HUMAN	DKFZp434D1313.1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434D1313 5'
11805	24395	37729	1.49	8.8E-02	P97803	SWISSPROT	CYTOKINE INDUCIBLE SH2-CONTAINING PROTEIN 3 (PROTEIN EF-10)
12155	24641	31088	2.66	8.8E-02	Z71581.1	NT	S. cerevisiae chromosome XIV reading frame ORF YNL283w
1642	14388	27077	1.15	8.7E-02	A1167281.1	EST_HUMAN	ox65b01.s1 Soares_NhHMPu_S1 Homo sapiens cDNA clone IMAGE:1681161 3'
3681	16434	29077	3.66	8.7E-02	U82695.2	NT	Homo sapiens zinc finger protein 92 (ZFP92), expressed-Xq28STS protein (XQ28ORF), and biglycan (BGN) genes, complete cds; and plasma membrane calcium ATPase isoform 3 (PMCA3) gene, partial cds
3681	16434	29078	3.66	8.7E-02	U82695.2	NT	Homo sapiens zinc finger protein 92 (ZFP92), expressed-Xq28STS protein (XQ28ORF), and biglycan (BGN) genes, complete cds; and plasma membrane calcium ATPase isoform 3 (PMCA3) gene, partial cds
4858	17392	30027	1.19	8.7E-02	AF179636.1	NT	Mus musculus JNK interacting protein-3a (Jip3) mRNA, complete cds
5231	18037	30863	5.88	8.7E-02	AA286875.1	EST_HUMAN	zs55g08.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:701438 3'
5231	18037	30864	5.88	8.7E-02	AA286875.1	EST_HUMAN	zs55g08.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:701438 3'
6745	19578	32612	0.77	8.7E-02	AJ271885.2	NT	Mus musculus partial Kcnq1 gene for potassium channel protein, exons 10-14
6745	19578	32613	0.77	8.7E-02	AJ271885.2	NT	Mus musculus partial Kcnq1 gene for potassium channel protein, exons 10-14
6943	19425	32440	0.71	8.7E-02	AF281342.1	NT	Oncorhynchus mykiss TAT-binding protein 1 mRNA, partial cds
7761	20457		0.45	8.7E-02	AA284532.1	EST_HUMAN	z220e03.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone IMAGE:713882 3'
8413	21106	34246	0.9	8.7E-02	AE004787.1	NT	Pseudomonas aeruginosa PA01, section 348 of 529 of the complete genome
8413	21106	34246	0.9	8.7E-02	AE004787.1	NT	Pseudomonas aeruginosa PA01, section 348 of 529 of the complete genome
10810	23304		2.46	8.7E-02	L04758.1	NT	Oryctolagus cuniculus cytochrome P-450 (CYP4A4) gene, 5' end
11282	23943	37237	2.55	8.7E-02	AJ007763.1	NT	Gluconobacter oxydans tRNA-Ile and tRNA-Ala genes
12145	24633		2.1	8.7E-02	X17116.1	NT	Human DNA for immunoglobulin alpha heavy chain from a case of alpha heavy chain disease
12340	24750		1.75	8.7E-02	8679057	NT	Mus musculus nidogen 2 (Nid2), mRNA
1230	13979	26649	7.02	8.6E-02	AJ271736.1	NT	Homo sapiens Xq pseudautosomal region; segment 2/2
2240	14968	27706	1.82	8.6E-02	BE408687.1	EST_HUMAN	601304016F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3638643 5'
3183	15946	28598	4.57	8.6E-02	L05468.1	NT	Trichomonas vaginalis beta-tubulin (btub1) gene, complete cds

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3635	18388		3.77	8.6E-02	AF153362.1	NT	Dictyostellium discoideum adenyllyl cyclase (ccaA) gene, complete cds
5134	17852		0.86	8.6E-02	BF570296.1	EST_HUMAN	602185716T1 NIH_MGC_45 Homo sapiens cDNA clone IMAGE:4310259 3'
6003	18784	31746	4.75	8.6E-02	Y10828.1	NT	Homo sapiens LCN1b gene
6281	18054	32033	1.56	8.6E-02	J00440.1	NT	Mouse germline IgM chain gene, D region; D-q52, mu switch region (part a)
6281	19054	32034	1.56	8.6E-02	J00440.1	NT	Mouse germline IgM chain gene, D region; D-q52, mu switch region (part a)
7481	20153	33248	1.34	8.6E-02	P14616	SWISSPROT	INSULIN RECEPTOR-RELATED PROTEIN PRECURSOR (IRR) (R-RELATED RECEPTOR)
7831	20528	33651	1.25	8.6E-02	5730066	NT	Homo sapiens Snf2-related CBP activator protein (SRCAP) mRNA
7831	20528	33652	1.25	8.6E-02	5730066	NT	Homo sapiens Snf2-related CBP activator protein (SRCAP) mRNA
7969	20864	33788	0.62	8.6E-02	11427428	NT	Homo sapiens hypothetical protein FLJ11008 (FLJ11008), mRNA
8031	20728		0.81	8.6E-02	U60168.1	NT	Dictyostellium discoideum proteasome subunit C2 homolog PrtC (prtC) gene, complete cds
9637	22289	35482	1.76	8.6E-02	AF111170.3	NT	Homo sapiens 14q32 Jagged2 gene, complete cds; and unknown gene
9673	22325		0.58	8.6E-02	AW662153.1	EST_HUMAN	h20c08.x1 NC1_CGAP_GU1 Homo sapiens cDNA clone IMAGE:2972846 3'
10063	22701	35918	0.81	8.6E-02	AF028604.1	NT	Rattus norvegicus SPA-1 like protein p1294 mRNA, complete cds
10865	23545	36792	1.8	8.6E-02	AF206551.1	NT	Lacerta media cytochrome c oxidase subunit 1 gene, partial cds; mitochondrial gene for mitochondrial product
10885	23545	36793	1.8	8.6E-02	AF206551.1	NT	Lacerta media cytochrome c oxidase subunit 1 gene, partial cds; mitochondrial gene for mitochondrial product
11214	23877	37163	4.64	8.6E-02	BF305606.1	EST_HUMAN	601893437F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4139216 5'
11214	23877	37164	4.64	8.6E-02	BF305606.1	EST_HUMAN	601893437F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4139216 5'
11417	23184	38414	5.97	8.6E-02	AE001079.1	NT	Archaeoglobus fulgidus section 34 of 172 of the complete genome
11668	24167	37481	2.11	8.6E-02	AF283660.1	NT	Bacillus stearothermophilus BarFI methylase (FilM) and BarFI restriction endonuclease (FIR) genes, complete cds
2395	15116	27853	3.3	8.6E-02	AE000662.1	NT	Helicobacter pylori 26695 section 130 of 134 of the complete genome
5583	18380	31292	0.75	8.6E-02	AA885491.1	EST_HUMAN	cg83b07.s1 NC1_CGAP_Kd8 Homo sapiens cDNA clone IMAGE:1592817 3' similar to gbK01144 HLA
5621	18417		1.29	8.6E-02	P09089	SWISSPROT	CLASS II HISTOCOMPATIBILITY ANTIGEN, GAMMA CHAIN PRECURSOR (HUMAN);
5921	18708	31658	6.95	8.6E-02	AF233885.1	NT	M PROTEIN, SEROTYPE 6 PRECURSOR
8504	21196	34340	1.65	8.6E-02	6754779	NT	Mus musculus phospholipase C-like protein mRNA, partial cds
9736	22387	35591	2.81	8.6E-02	BE833054.1	EST_HUMAN	Mus musculus myosin XV (Myo15), mRNA
9736	22387	35592	2.81	8.6E-02	BE833054.1	EST_HUMAN	RC4-OT0037-200700-014-s05 OT0037 Homo sapiens cDNA
10261	22909	36119	0.54	8.6E-02	X76731.1	NT	RC4-OT0037-200700-014-s06 OT0037 Homo sapiens cDNA
10382	23028	36243	0.87	8.6E-02	11418108	NT	V. armodyles gene for armodylin C
11105	23775		8.87	8.6E-02	AF155510.1	NT	Homo sapiens chromosome 22 open reading frame 5 (C22ORF5), mRNA
11125	23794	37070	4.43	8.6E-02	AB001562.1	NT	Homo sapiens haperases precursor, mRNA, complete cds
							Streptococcus mutans gene for glucose-1-phosphate uridylyltransferase, complete cds

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12700	24981		3.8	8.6E-02	AA362934.1	EST_HUMAN	EST12736 Ovary II Homo sapiens cDNA 5' end
2672	15902	28121	3.73	8.4E-02	W68330.1	EST_HUMAN	z144411.1 Soares fetal heart N18F119W Homo sapiens cDNA clone IMAGE:343532 5'
3801	16553	29184	1	8.4E-02	A1827586.1	EST_HUMAN	w1011.x1 Soares NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2350221 3' similar to contains element MSR1 repetitive element;
4321	17060	28685	1.07	8.4E-02	AF257213.1	NT	Cavia porcellus glycoprotein alpha-subunit mRNA, complete cds
4321	17060	28686	1.07	8.4E-02	AF257213.1	NT	Cavia porcellus glycoprotein alpha-subunit mRNA, complete cds
5137	17855	30472	4.97	8.4E-02	AB042555.1	NT	Homo sapiens mRNA, similar to rat myomegalin, complete cds
5229	18035	30661	9.84	8.4E-02	BE267153.1	EST_HUMAN	601190436F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3534393 5'
6590	19353	32366	1.72	8.4E-02	AK024458.1	NT	Homo sapiens mRNA for FLJ00050 protein, partial cds
7928	20623	33761	7.18	8.4E-02	BE095074.1	EST_HUMAN	CM3-BT0760-260400-182-d05 BT0760 Homo sapiens cDNA
8741	21433	34578	1.01	8.4E-02	AF218890.1	NT	Homo sapiens attractin precursor (ATRIN) gene, exon 2
10280	22908	36118	1.83	8.4E-02	A1735184.1	EST_HUMAN	ss88g10.x1 Barstead colon HPLR87 Homo sapiens cDNA clone IMAGE:2335842 3' similar to TR:O88312
12070	24584	31122	1.88	8.4E-02	R79408.1	EST_HUMAN	y83h12.f1 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:145895 5'
2005	14741	27465	0.92	8.3E-02	5835080	NT	Isodes hexagonus mitochondrion, complete genome
2005	14741	27466	0.92	8.3E-02	5835680	NT	Isodes hexagonus mitochondrion, complete genome
3580	16335	28980	6.91	8.3E-02	P75334	SWISSPROT	HYPOTHETICAL LIPOPROTEIN MG309 HOMOLOG PRECURSOR
3607	16300	29001	0.83	8.3E-02	A1436797.1	EST_HUMAN	tb82g05.x1 Soares NHMPu_S1 Homo sapiens cDNA clone IMAGE:2125210 3'
3607	16360	29002	0.83	8.3E-02	A1436797.1	EST_HUMAN	tb82g05.x1 Soares NHMPu_S1 Homo sapiens cDNA clone IMAGE:2125210 3'
6166	18943	31914	1.05	8.3E-02	A1942338.1	EST_HUMAN	w078f11.x1 NCI_CGAP_Kd11 Homo sapiens cDNA clone IMAGE:2461581 3'
6273	19046	32023	3.05	8.3E-02	AF052583.1	NT	Homo sapiens protocadherin 43 gene, exon 1
7880	20575	33702	2.98	8.3E-02	AF195787.1	NT	Rattus norvegicus dystrophin-related protein 2 A-form splice variant (Dnp2) mRNA, complete cds
7911	20606		1.46	8.3E-02	AA865285.1	EST_HUMAN	cg88g08.s1 NCI_CGAP_Kd5 Homo sapiens cDNA clone IMAGE:1455422 3' similar to contains L1.H L1 L1
8198	20892		1.32	8.3E-02	AA967873.1	EST_HUMAN	repetitive element;
9438	22116	35291	1.41	8.3E-02	AW593503.1	EST_HUMAN	lc05h10.x1 Human Pancreatic Islets Homo sapiens cDNA 3' similar to TR:Q15332 Q15332 GAMMA SUBUNIT OF SODIUM POTASSIUM ATPASE LIKE;
9451	22001		1.88	8.3E-02	AL161565.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 91
10240	22888		0.49	8.3E-02	AF020409.1	NT	Dicotyledon discoidum DocA (docA) mRNA, complete cds
12158	25353		1.97	8.3E-02	BE658458.1	EST_HUMAN	601844770F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:3928683 5'
1357	14105		7.15	8.2E-02	Y08170.2	NT	Gallus gallus mRNA for OBCAM protein gamma isoform
1481	14228	26914	1.99	8.2E-02	AF167077.2	NT	Canis familiaris glutamate transporter (EAAT4) mRNA, complete cds
3071	15837		2.07	8.2E-02	AL163206.2	NT	Homo sapiens chromosome 21 segment HS21C006
3784	16536		1.35	8.2E-02	AL161498.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 10

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3989	18737	28371	1.07	8.2E-02	AL163206.2	NT	Homo sapiens chromosome 21 segment HS21C006
4251	18992	28617	4.97	8.2E-02	P48960	SWISSPROT	LEUCOCYTE ANTIGEN CD97 PRECURSOR
4251	18992	28618	4.97	8.2E-02	P48960	SWISSPROT	LEUCOCYTE ANTIGEN CD97 PRECURSOR
4251	18992	28619	4.97	8.2E-02	P48960	SWISSPROT	LEUCOCYTE ANTIGEN CD97 PRECURSOR
5022	17743	30354	2.44	8.2E-02	U76009.1	NT	Mus musculus zinc transporter (ZnT-3) gene, complete cds
5070	17789		2.39	8.2E-02	Z68893.1	NT	T.inflatum transposon Resless DNA
5252	18058	30887	1.49	8.2E-02	BE987030.1	EST_HUMAN	601438578F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3924523 5'
6925	18661	32707	3.09	8.2E-02	AF308555.1	NT	Bos taurus connective tissue growth factor precursor (CTGF) gene, complete cds
7632	20298		0.57	8.2E-02	AV743341.1	EST_HUMAN	AV743341 CB Homo sapiens cDNA clone CBLANF07 5'
8670	21362	34509	2.95	8.2E-02	AW876126.1	EST_HUMAN	RC2-PT0004-031289-011-d05 PT0004 Homo sapiens cDNA
9499	22152	35332	5.36	8.2E-02	X04197.1	NT	Beet necrotic yellow vein virus RNA-2
9663	22315	35512	2.24	8.2E-02	BE254318.1	EST_HUMAN	601115055F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3355596 5'
12184	24646	31102	4.03	8.2E-02	AE002246.2	NT	Chlamydomonas reinhardtii AFR39, section 73 of 94 of the complete genome
12554	25138		3.65	8.2E-02	AF275396.1	NT	Mus musculus epidermal growth factor receptor (Egfr) gene, exons 5 through 28, and complete cds, alternatively spliced
5688	18463	31378	0.79	8.1E-02	AE004008.1	NT	Xylella fastidiosa, section 152 of 228 of the complete genome
6286	18059	32040	1.19	8.1E-02	T11532.1	EST_HUMAN	A1484F Heart Homo sapiens cDNA clone A1484
7097	19786		0.86	8.1E-02	AL163279.2	NT	Homo sapiens chromosome 21 segment HS21C079
7482	20164		1.25	8.1E-02	A1692681.1	EST_HUMAN	wd86808.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:2338503 3'
8238	20832	34097	0.61	8.1E-02	11426974	NT	Homo sapiens hypothetical protein FLJ10080 (FLJ10080), mRNA
8238	20832	34098	0.61	8.1E-02	11426974	NT	Homo sapiens hypothetical protein FLJ10080 (FLJ10080), mRNA
9812	22463		1.64	8.1E-02	AY005160.1	NT	Homo sapiens extracellular glycoprotein lactrin precursor, gene, complete cds
11482	24083	37395	2.08	8.1E-02	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
5	15534	25447	5.03	8.0E-02	AW854653.1	EST_HUMAN	EST356723 IMAGE resequences, MAGC Homo sapiens cDNA
915	13682	26344	0.79	8.0E-02	U60315.1	NT	Molluscum contagiosum virus subtype 1, complete genome
1694	15578	27134	9.85	8.0E-02	D26835.1	NT	Human gene for dihydropyrimidine succinyltransferase, complete cds (exon 1-15)
1694	15578	27135	9.85	8.0E-02	D26835.1	NT	Human gene for dihydropyrimidine succinyltransferase, complete cds (exon 1-15)
1896	14633	27343	3.27	8.0E-02	BE067219.1	EST_HUMAN	PM3-BT0347-170200-001-b08 BT0347 Homo sapiens cDNA
2374	15086	27835	1.09	8.0E-02	D06915.1	NT	Synechocystis sp. PCC6803 complete genome, 17/27, 2137259-2287259
2374	15086	27836	1.09	8.0E-02	D06915.1	NT	Synechocystis sp. PCC6803 complete genome, 17/27, 2137259-2287259
2473	15191		4.2	8.0E-02	BF246744.1	EST_HUMAN	601855548F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4075619 5'
2823	13827	28486	0.86	8.0E-02	M23449.1	NT	Dicotyledon dicotyledon cytochrome P450 1A1 gene, complete cds
2801	15067	28315	1.45	8.0E-02	AL445067.1	NT	Thermoplasma acidophilum complete genome, segment 5/5
3797	16549	28182	1.01	8.0E-02	AW986118.1	EST_HUMAN	EST378191 IMAGE resequences, MAGI Homo sapiens cDNA

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4725	17457	30093	1.43	8.0E-02	AI434202.1	EST_HUMAN	h31g02.x1 NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2132114 3'
4764	17498		6.33	8.0E-02	XT2784.1	NT	M.musculus gene for gelatinase B
5108	17828	30443	0.87	8.0E-02	AW207037.1	EST_HUMAN	UI-H-B17-af4-1-10-0-UI.1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2721547 3'
5801	18581	31516	3.15	8.0E-02	AF278948.1	NT	Homo sapiens ABCA1 (ABCA1) gene, complete cds
7080	18591	31516	1.82	8.0E-02	AF278948.1	NT	Homo sapiens ABCA1 (ABCA1) gene, complete cds
8027	20722	33854	3.79	8.0E-02	AL114993.1	NT	Botrytis cinerea strain T4 cDNA library under conditions of nitrogen deprivation
9289	21956	35127	1.12	8.0E-02	X74208.1	NT	H. sapiens AGT gene, intron 4
9289	21956	35128	1.12	8.0E-02	X74208.1	NT	H. sapiens AGT gene, intron 4
10058	22706		0.55	8.0E-02	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C008
10892	23383	36823	2.27	8.0E-02	AF217798.1	NT	Homo sapiens SCG10 like-protein, helicase-like protein NHL, M88, and ADP-ribosylation factor related protein 1 (ARFRP1) genes, complete cds
12185	24085	31070	6.39	8.0E-02	AJ005375.1	NT	Drosophila arena hunchback region
12748	17903		2.21	8.0E-02	4803034	NT	Homo sapiens cAMP responsive element binding protein-like 2 (CREBL2) mRNA
2171	14900	27634	3.52	7.8E-02	BE260008.1	EST_HUMAN	600843181F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2858510 5'
2978	15744	28392	7.25	7.9E-02	AI582028.1	EST_HUMAN	ar88c08.x1 Barabased colon HPLRB7 Homo sapiens cDNA clone IMAGE:2173646 3' similar to gb:Z28876 60S RIBOSOMAL PROTEIN L38 (HUMAN);
3777	16529	29168	0.97	7.9E-02	AF030694.2	NT	Pleurothidium falciparum strain Dd2 heat shock protein 88 (HSP88), O1 (o1), O3 (o3), O2 (o2), CG8 (cg8), CG4 (cg4), CG3 (cg3), putative chloroquine resistance transporter (crt), CG9 (cg9), CG1 (cg1), CG6 (cg6), CG2 (cg2), and CG7 (cg7) genes, complete cds
3832	16583	29217	5.01	7.9E-02	6881044	NT	Mus musculus colony stimulating factor 1 receptor (Csf1r), mRNA
3832	16583	29218	5.01	7.9E-02	6881044	NT	Mus musculus colony stimulating factor 1 receptor (Csf1r), mRNA
4845	17379	30011	0.99	7.9E-02	BF348454.1	EST_HUMAN	602018770F1 NCI_CGAP_Bim67 Homo sapiens cDNA clone IMAGE:4155401 5'
4760	17492		1.31	7.9E-02	AB009019.1	NT	Arabidopsis thaliana RXW24L mRNA, partial cds
4951	17581	30204	1.02	7.9E-02	L24757.1	NT	Human bone sialoprotein (BSP) gene, exons 2, 3 and 4
6597	18360		1.16	7.9E-02	BF368018.1	EST_HUMAN	RC3-GN0042-310800-024-411 GN0042 Homo sapiens cDNA
7931	20628	33754	2.79	7.9E-02	U27832.1	NT	Seccharomyces cerevisiae suppressor of MIF2 Smt4p (SMT4) gene, complete cds
8927	22576	35773	4.21	7.9E-02	AI081644.1	EST_HUMAN	cu83b05.a1 NCI_CGAP_Br2 Homo sapiens cDNA clone IMAGE:1632465 3' similar to WP:C37A2.2
9927	22576	35774	4.21	7.9E-02	AI081644.1	EST_HUMAN	CE08811; cu83b05.a1 NCI_CGAP_Br2 Homo sapiens cDNA clone IMAGE:1632465 3' similar to WP:C37A2.2
1188	13940	28804	1.77	7.8E-02	AI793275.1	EST_HUMAN	oos5d02.y5 NCI_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1570467 5' similar to contains L1.13 L1 repetitive element;
1188	13940	28905	1.77	7.8E-02	AI793275.1	EST_HUMAN	oos5d02.y5 NCI_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1570467 5' similar to contains L1.13 L1 repetitive element;

Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5027	16484		2.47	7.8E-02	BE250048.1	EST_HUMAN	600843055F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2859693 5'
6976	19457	32479	0.88	7.8E-02	U82895.2	NT	Homo sapiens zinc finger protein 92 (ZFP92), expressed-Xq28STS protein (XQ28ORF), and biglycan (BGN) genes, complete cds; and plasma membrane calcium ATPase isoform 3 (PMCA3) gene, partial cds
6976	19457	32480	0.88	7.8E-02	U82895.2	NT	Homo sapiens zinc finger protein 92 (ZFP92), expressed-Xq28STS protein (XQ28ORF), and biglycan (BGN) genes, complete cds; and plasma membrane calcium ATPase isoform 3 (PMCA3) gene, partial cds
8984	21376	34520	0.71	7.8E-02	BE897947.1	EST_HUMAN	601440439F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3925449 5'
8779	21471	34816	0.66	7.8E-02	X78344.1	NT	S.cerevisiae CAT8 gene
8951	21842	34789	0.79	7.8E-02	AF233437.1	NT	Homo sapiens FYVE domain-containing dual specificity protein phosphatase FYVE-DSP1b mRNA, complete cds
8951	21842	34790	0.79	7.8E-02	AF233437.1	NT	Homo sapiens FYVE domain-containing dual specificity protein phosphatase FYVE-DSP1b mRNA, complete cds
9281	22015	35183	1.07	7.8E-02	AA469354.1	EST_HUMAN	nc88506.r1 NCI_CGAP_P1 Homo sapiens cDNA clone IMAGE:771731
9701	22352	35547	0.62	7.8E-02	Z98124.1	NT	Bacillus subtilis complete genome (section 21 of 21); from 3998281 to 4214814
10562	23258	36494	4.58	7.8E-02	U32323.1	NT	Human Interleukin-11 receptor alpha chain gene, complete cds
12764	25015		3.92	7.8E-02	AF098349.1	NT	HIV-1 strain 97USNG30 from USA, envelope glycoprotein (env) gene, partial cds
1378	15568	28600	1.25	7.7E-02	AF161897.1	NT	Homo sapiens WRN (WRN) gene, complete cds
3574	18328		1.97	7.7E-02	AJ238093.1	NT	Homo sapiens partial AF-4 gene, exons 2 to 7 and Alu repeat elements
5466	18256	31145	0.59	7.7E-02	AF062838.1	NT	Gallus gallus collagen type XII alpha-1 (COL12A1) gene, promoter region and partial cds
7809	20504	33825	5.37	7.7E-02	AA402849.1	EST_HUMAN	zu53d11.1 Soares ovary tumor N6HOT Homo sapiens cDNA clone IMAGE:741717 5' similar to
9735	22386	35590	3.94	7.7E-02	P38080	SWISSPROT	TR:G1173905 G1173905 SPLICEOSOME ASSOCIATED PROTEIN ; PROBABLE SERINE/THREONINE-PROTEIN KINASE YBR059C
10031	22879	35895	0.85	7.7E-02	AI318662.1	EST_HUMAN	ts80b08.x1 NCI_CGAP_HSC2 Homo sapiens cDNA clone IMAGE:2050359 3' similar to gb:Z26876 80S
10031	22879	35896	0.85	7.7E-02	AI318662.1	EST_HUMAN	RIBOSOMAL PROTEIN L38 (HUMAN);
10933	23813	36983	4.51	7.7E-02	11422757	NT	ts80b08.x1 NCI_CGAP_HSC2 Homo sapiens cDNA clone IMAGE:2050359 3' similar to gb:Z26876 80S
12389	25215		2.68	7.7E-02	11438859	NT	RIBOSOMAL PROTEIN L38 (HUMAN);
3382	16141	28788	1.97	7.6E-02	BE514432.1	EST_HUMAN	Homo sapiens KIAA0628 gene product (KIAA0628), mRNA
3403	16161	28812	1.14	7.6E-02	AA298447.1	EST_HUMAN	Homo sapiens interferon regulatory factor 7 (IRF7), mRNA
3647	18302	28962	0.71	7.6E-02	AJ400877.1	NT	601318425F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3634903 5'
8006	18787	31749	0.81	7.6E-02	AI061275.1	EST_HUMAN	EST112214 Cerebellum II Homo sapiens cDNA 5' end similar to similar to protocadherin 43
							Homo sapiens ASCL3 gene, CEGP1 gene, C11orf14 gene, C11orf15 gene, C11orf16 gene and C11orf17 gene
							an25g02.x1 Geesler Wilms tumor Homo sapiens cDNA clone IMAGE:1699730 3'

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6263	19037	32012	0.92	7.6E-02	BE378328.1	EST_HUMAN	801236402F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3608401 5'
9270	22024	35194	1.47	7.6E-02	AJ131016.1	NT	Homo sapiens SCL gene locus
9797	22448		1.63	7.6E-02	AL139078.2	NT	Campylobacter jejuni NCTC11188 complete genome; segment 5/8
10119	22767	35979	0.49	7.6E-02	BE709002.1	EST_HUMAN	RC1-HT0645-020800-017-c08 HT0545 Homo sapiens cDNA
10247	22895		0.75	7.6E-02	BE95938.2	EST_HUMAN	801954915R1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:3839810 3'
10487	23133	36350	0.71	7.6E-02	X92858.1	NT	Lacculatum mRNA for tissue phosphatase translocator
10487	23133	36360	0.71	7.6E-02	X92858.1	NT	Lacculatum mRNA for tissue phosphatase translocator
11678	24273	37595	2.45	7.6E-02	AW996645.1	EST_HUMAN	QV3-BN0046-150400-151-c04 BN0046 Homo sapiens cDNA
767	13540	26199	1.44	7.5E-02	5902093	NT	Homo sapiens solute carrier family 6 (neurotransmitter transporter, glycine), member 9 (SLC6A9), mRNA
767	13540	26200	1.44	7.6E-02	5902093	NT	Homo sapiens solute carrier family 6 (neurotransmitter transporter, glycine), member 9 (SLC6A9), mRNA
4472	17207	29833	1.17	7.5E-02	AB015981.1	NT	Homo sapiens IL-18 gene for Interleukin-18, intron 1 and exon 2
5762	18553	31477	0.97	7.5E-02	A1948714.1	EST_HUMAN	wq24109.x1 NCL_CGAP_K411 Homo sapiens cDNA clone IMAGE:2472257 3'
8238	20630	34066	1.05	7.5E-02	A1884357.1	EST_HUMAN	wf52b02.x1 NCL_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2428491 3' similar to gb:U14328 ALPHA ENOLASE (HUMAN);
8405	21098	34234	1.17	7.5E-02	AU116913.1	EST_HUMAN	AU116913 HEMBA1 Homo sapiens cDNA clone HEMBA1000284 5'
9632	22690		0.64	7.6E-02	BF221730.1	EST_HUMAN	7d61c05.x1 NCL_CGAP_P128 Homo sapiens cDNA clone IMAGE:3578504 3' similar to contains element MER27 repetitive element;
10390	23036	36252	0.7	7.6E-02	BF206809.1	EST_HUMAN	601870205F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4100449 5'
10488	23134	36361	0.72	7.5E-02	X79460.1	NT	C.fiml DSM 20113 16S rDNA
465	13260	26391	1.48	7.4E-02	AW838547.1	EST_HUMAN	RC5-LT0054-260100-011-H09 LT0054 Homo sapiens cDNA
1445	14192		0.92	7.4E-02	AF030027.1	NT	Equine herpesvirus 4 strain NS80567, complete genome
2565	15299		1.32	7.4E-02	6755069	NT	Mus musculus paired-like homeodomain transcription factor 1 (Pitx1), mRNA
3581	16336	28081	0.86	7.4E-02	A1807885.1	EST_HUMAN	wf43h01.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2358385 3'
4656	17390	30024	2.03	7.4E-02	L79810.1	NT	Homo sapiens ADP/ATP carrier protein (ANT-2) gene, complete cds
4741	17473	30108	2.94	7.4E-02	6978442	NT	Rattus norvegicus Adipon receptor like kinase 1 (Acvrl1), mRNA
4889	17616	30235	2.1	7.4E-02	6678402	NT	Mus musculus ubiquitin o-terminal hydrolase related polypeptide (Uchlp), mRNA
6403	19172		2.18	7.4E-02	R17477.1	EST_HUMAN	yg14g08.r1 Soares Infant brain 1N1B Homo sapiens cDNA clone IMAGE:32339 5'
7801	20496	33616	1.52	7.4E-02	BE80112.1	EST_HUMAN	901463366F1 NIH_MGC_99 Homo sapiens cDNA clone IMAGE:3895294 5'
8399	21092	34228	1.03	7.4E-02	U60890.1	NT	Human periodic tyrophen protein 2 (PWP2) gene, exons 15 to 21, and complete cds
9064	21753	34913	1.12	7.4E-02	AW629605.1	EST_HUMAN	ih67d11.y1 NCL_CGAP_GU1 Homo sapiens cDNA clone IMAGE:2867881 5' similar to SW_SCA2_HUMAN O15127 SECRETORY CARRIER-ASSOCIATED MEMBRANE PROTEIN 2;

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9084	21793	34914	1.12	7.4E-02	AW629005.1	EST_HUMAN	hh67d11.y1 NCI_CGAP_GU1 Homo sapiens cDNA clone IMAGE:2967861 5' similar to SW_SCA2_HUMAN
9339	20410	33525	0.52	7.4E-02	AI672939.1	EST_HUMAN	O15127 SECRETORY CARRIER-ASSOCIATED MEMBRANE PROTEIN 2;
9339	20410	33526	0.52	7.4E-02	AI672939.1	EST_HUMAN	wa74002.x1 Soares_Dickgrafe_colon_NHCD Homo sapiens cDNA clone IMAGE:2346819 3'
9714	22365	35963	1.03	7.4E-02	U62293.1	NT	wa74002.x1 Soares_Dickgrafe_colon_NHCD Homo sapiens cDNA clone IMAGE:2346819 3'
9841	22492	35992	0.52	7.4E-02	BF512678.1	EST_HUMAN	Human LIM-kinase1 and alternatively spliced LIM-kinase1 (LIMK1) gene, complete cds
10639	23619	36889	1.26	7.4E-02	AA059167.1	EST_HUMAN	UI-H-BW1-arr-g-08-0-J1.s1 NCI_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3060608 3'
12126	24618		1.53	7.4E-02	11523593	NT	z64601.t1 Soares_refina_N244HR Homo sapiens cDNA clone IMAGE:361720 5'
12381	25329		2.21	7.4E-02	AW379431.1	EST_HUMAN	Homo sapiens histone deacetylase 5 (NY-CO-9), mRNA
456	13242	25881	1.5	7.3E-02	BE984961.2	EST_HUMAN	CMA-H-T0243-081199-037-411 HT0243 Homo sapiens cDNA
459	13242	25882	1.5	7.3E-02	BE984961.2	EST_HUMAN	601668738R1 NIH_MGC_89 Homo sapiens cDNA clone IMAGE:3886209 3'
669	13445	26085	3.9	7.3E-02	AE001789.1	NT	601658738R1 NIH_MGC_89 Homo sapiens cDNA clone IMAGE:3886209 3'
1484	15570	26900	3.62	7.3E-02	AW900281.1	EST_HUMAN	Thermococcus maritima section 101 of 136 of the complete genome
1837	15590		12.41	7.3E-02	AL163302.2	NT	CNM0-NN1004-130300-284-g08 NN1004 Homo sapiens cDNA
6361	19131	32126	1.32	7.3E-02	AA779877.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C102
7368	20048	33129	2.58	7.3E-02	P05143	SWISSPROT	z24402.s1 Soares_fetal_liver_spleen_INFLS_S1 Homo sapiens cDNA clone IMAGE:451178 3' similar to
7368	20048	33129	2.58	7.3E-02	P05143	SWISSPROT	gb:U02426 26S PROTEASE SUBUNIT 4 (HUMAN);
8068	20762		1.16	7.3E-02	7662107	NT	PROLINE-RICH PROTEIN MP-3
9110	21798		1.14	7.3E-02	AB011090.1	NT	Homo sapiens KIAA0424 protein (KIAA0424), mRNA
11170	19131	32126	2.06	7.3E-02	AA779877.1	EST_HUMAN	Homo sapiens mRNA for KIAA0518 protein, partial cds
11844	24428		5.07	7.3E-02	11560138	NT	z24402.s1 Soares_fetal_liver_spleen_INFLS_S1 Homo sapiens cDNA clone IMAGE:451178 3' similar to
117	12937	25577	1	7.2E-02	AEO00882.1	NT	gb:U02426 26S PROTEASE SUBUNIT 4 (HUMAN);
117	12937	25578	1	7.2E-02	AEO00882.1	NT	Rattus norvegicus caspase recruitment domain protein 9 (LOC64171), mRNA
1458	14205	26890	2.72	7.2E-02	AL163301.2	NT	Methanobacterium thermoautotrophicum from bases 1029155 to 1039834 (section 88 of 148) of the complete genome
1458	14205	26891	2.72	7.2E-02	AL163301.2	NT	Methanobacterium thermoautotrophicum from bases 1029155 to 1039834 (section 88 of 148) of the complete genome
2552	15267		2.83	7.2E-02	U14794.1	NT	Homo sapiens chromosome 21 segment HS21C101
3885	16815	29254	0.95	7.2E-02	AW298322.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C101
4312	17051	29676	4.65	7.2E-02	BF572307.1	EST_HUMAN	Homo sapiens immunodeficiency virus type 1 isolate 28 reverse transcriptase (pol) gene, internal fragment, partial cds
4644	17378	30010	0.7	7.2E-02	11469563	NT	UI-H-BW0-aj-a-05-0-J1.s1 NCI_CGAP_Sub6 Homo sapiens cDNA clone IMAGE:2792049 3'
							602077757F1 NIH_MGC_62 Homo sapiens cDNA clone IMAGE:4251950 5'
							Rhodospirillum rubrum mitochondrion, complete genome



Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6205	18013	30635	2.88	7.2E-02	U87531.1	NT	Methanococcus jannaschii section 73 of 160 of the complete genome
5206	18014	30636	10.1	7.2E-02	P11120	SWISSPROT	CALMODULIN
7068	19759	32824	1.58	7.2E-02	BF216086.1	EST_HUMAN	601863558F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4085710 5'
7065	19775	32840	0.64	7.2E-02	AF221126.1	NT	Streptococcus pneumoniae putative response regulator (zmpR), putative histidine kinase (zmpS), and putative zinc metalloprotease (zmpB) genes, complete cds
7109	19797		1.5	7.2E-02	5834807	NT	Strongylocentrotus purpuratus mitochondrion, complete genome
8087	20781	33910	0.8	7.2E-02	P06143	SWISSPROT	PROLINE-RICH PROTEIN MP-3
8087	20781	33911	0.8	7.2E-02	P06143	SWISSPROT	PROLINE-RICH PROTEIN MP-3
8982	21653		0.81	7.2E-02	Y17217.1	NT	Lactococcus lactis casE gene
9474	22127		0.49	7.2E-02	X16349.1	NT	Human gene for sex hormone-binding globulin (SHBG)
9511	22184	35348	2.32	7.2E-02	AV712452.1	EST_HUMAN	AV712452 DCA Homo sapiens cDNA clone DCAAUG01 5'
9659	22311	35509	3.8	7.2E-02	L14561.1	NT	Homo sapiens plasma membrane calcium ATPase isoform 1 (ATP2B1) gene, alternative splice products, partial cds
9614	22485	35887	0.93	7.2E-02	BF125399.1	EST_HUMAN	601763523F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:4029439 5'
9903	22552	35747	2.53	7.2E-02	AW873187.1	EST_HUMAN	h24f11.x1 NCL_CGAP_Adr1 Homo sapiens cDNA clone IMAGE:3120333 3' similar to TR:Q9Z340 Q9Z340
10082	22740	35955	0.92	7.2E-02	AA768204.1	EST_HUMAN	ATYPICAL PKC SPECIFIC BINDING PROTEIN. ;
							oe82c07.s1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1316844 3'
10250	22898	36108	1.93	7.2E-02	U82895.2	NT	Homo sapiens zinc finger protein 92 (ZFP92), expressed-Xq28STS protein (XQ28ORF), and biglycan (BGN) genes, complete cds; and plasma membrane calcium ATPase isoform 3 (PMCA3) gene, partial cds
10372	23018	36234	5.54	7.2E-02	BE565003.1	EST_HUMAN	601343928F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3685951 5'
10395	23041		3.88	7.2E-02	BE539214.1	EST_HUMAN	601065194F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3451559 5'
10509	23155	36381	0.48	7.2E-02	AA706897.1	EST_HUMAN	2/28h05.s1 Soares_fetal_liver_spleen_TNFLS_S1 Homo sapiens cDNA clone IMAGE:451641 3'
10830	23512	36783	3.3	7.2E-02	AF049874.1	NT	Rattus norvegicus bHLH transcription factor Mist1 (Mist1) gene, complete cds
11849	24433	37775	1.34	7.2E-02	AY009090.1	NT	Homo sapiens putative transmembrane protein dedh-1 mRNA, complete cds
12035	24580	31113	1.67	7.2E-02	AA773906.1	EST_HUMAN	af18a04.r1 Soares_NhlhMpu_S1 Homo sapiens cDNA clone IMAGE:1048398 5'
12089	24593		4.45	7.2E-02	AJ230796.1	EST_HUMAN	AJ230796 Homo sapiens library (Seranaki P) Homo sapiens cDNA clone PS13D5 3'
12182	24654		1.73	7.2E-02	U82828.1	NT	Homo sapiens atolia telangiectasia (ATM) gene, complete cds
12196	25185		8.19	7.2E-02	AW900982.1	EST_HUMAN	CMA4-NH1009-203300-118-c11 NH1009 Homo sapiens cDNA
12599	25362		3.62	7.2E-02	AF020439.1	NT	Homo sapiens ATP-citrate lyase gene, intron 3
1897	14634	27344	2.01	7.1E-02	L02290.1	NT	Human immunodeficiency virus type 1 (D9) proviral structural capsid protein (gag) gene, partial cds
2290	15015	27751	5.07	7.1E-02	BF208902.1	EST_HUMAN	601872281F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:4092981 5'
7807	20502	33622	0.77	7.1E-02	A1125204.1	EST_HUMAN	qd82a10.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1736922 3'

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Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11922	24483		6.41	7.1E-02	BE304764.1	EST_HUMAN	601143974F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:3051234 5'
515	13299	25931	1	7.0E-02	Q07092	SWISSPROT	COLLAGEN ALPHA 1(XVI) CHAIN PRECURSOR
1498	14233		1.27	7.0E-02	X08877.1	NT	Martellia Mitot-1 gene
1756	14498	27198	1.08	7.0E-02	AA056343.1	EST_HUMAN	268104.s1 Strategene colon (#937204) Homo sapiens cDNA clone IMAGE:508599 3'
3027	15783	28440	2.1	7.0E-02	AW198152.1	EST_HUMAN	UI-H-BH-acy-c-07-0-UJ.s1 NCI CGAP Sub3 Homo sapiens cDNA clone IMAGE:2718020 3'
3878	16628	28288	0.74	7.0E-02	AA815438.1	EST_HUMAN	at05a12.s1 Soares testis_NHT Homo sapiens cDNA clone 1375678 3' similar to gb:K03002 80S
4119	16861		1.28	7.0E-02	AW792862.1	EST_HUMAN	RIBOSOMAL PROTEIN L32 (HUMAN);
4189	16930	28560	1.06	7.0E-02	AF077821.1	NT	CMQ-UM0001-060300-270-a12 UM0001 Homo sapiens cDNA
4877	17604	30227	7.24	7.0E-02	BF381887.1	EST_HUMAN	Canis familiaris inducible nitric oxide synthase mRNA, complete cds
5293	18086		0.57	7.0E-02	Y08143.2	NT	601816291F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:4050071 5'
7300	19883	33059	1.29	7.0E-02	AV689285.1	EST_HUMAN	Lumbicus rubellus mRNA for cyclophilin B
7608	20177	33271	0.84	7.0E-02	Y19187.1	NT	AV689285 GK Homo sapiens cDNA clone GKCCAE06 5'
8996	21688	34836	1.26	7.0E-02	9628113	NT	Gallus gallus mRNA for partial accorin, XL spliced variant (acc gene)
9497	22150	35331	1.24	7.0E-02	K02901.1	NT	African swine fever virus, complete genome
9852	22502	35702	0.51	7.0E-02	U27286.1	NT	Rat Ig germline epsilon H-chain gene C-region, 3' end
11345	24035	37338	4.98	7.0E-02	AA724285.1	EST_HUMAN	Human myosin binding protein H (MyBP-H) gene, complete cds
501	13285	25917	4.3	6.9E-02	AL163210.2	NT	h99a05.s1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1327184 3' similar to gb:U14837
501	13285	25918	4.3	6.9E-02	AL163210.2	NT	TIGHT JUNCTION PROTEIN ZO-1 (HUMAN);
1310	14058		1.2	6.9E-02	4507968	NT	Homo sapiens chromosome 21 segment HS21C010
3773	18525	29163	1.41	6.9E-02	Q08384	SWISSPROT	Homo sapiens chromosome 21 segment HS21C010
3773	18525	29164	1.41	6.9E-02	Q08384	SWISSPROT	Homo sapiens regulator of Gz-selective protein signaling (ZGAP1) mRNA, and translated products
5113	17831	30448	0.89	6.9E-02	AF121254.1	NT	28S PROTEASOME REGULATORY SUBUNIT S3 (NUCLEAR ANTIGEN 21D7)
5127	17845	30482	1.25	6.9E-02	BE264005.1	EST_HUMAN	28S PROTEASOME REGULATORY SUBUNIT S3 (NUCLEAR ANTIGEN 21D7)
7516	20187		0.61	6.9E-02	AF164967.1	NT	Enterococcus faecium cysteine aminopeptidase (pepC) gene, partial cds; phospho-beta-glucosidase BglB (bglB), beta-glucoside specific transport protein (bglS), transcription antiterminator (bglR), enterocin B precursor (entB), enterocin B immunity protease
7951	20646		1.12	6.9E-02	U12022.1	NT	601192383F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3538253 5'
8451	21143	34282	1.01	6.9E-02	BE567435.1	EST_HUMAN	Canine distemper virus strain A7517, complete genome
8451	21143	34283	1.01	6.9E-02	BE567435.1	EST_HUMAN	Human calmodulin (CALM1) gene, exons 2,3,4,5 and 6, and complete cds
9018	21708	34860	0.7	6.9E-02	U22967.1	NT	601340061F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3683030 5'
12065	24580		1.82	6.8E-02	X74315.1	NT	601340061F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3683030 5'
							Barbelle duck parvovirus REP protein (rep) and three capsid protein VP (vp) genes, complete cds
							Xlaevis XFD2 mRNA for fork head protein

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12232	24695		1.69	6.8E-02	P44621	SWISSPROT	PROTEIN TRANSPORT PROTEIN HOF6 HOMOLOG
12447	24617		1.46	6.8E-02	AF195953.1	NT	Homo sapiens membrane-bound aminopeptidase P (XNPEP2) gene, complete cds
1875	14613	27321	1.56	6.8E-02	AA496759.1	EST_HUMAN	ss30702.1 Gessler Wilms tumor Homo sapiens cDNA clone IMAGE:897339 5' similar to gb:M22382
1875	14613	27322	1.58	6.8E-02	AA496759.1	EST_HUMAN	ss30702.1 Gessler Wilms tumor Homo sapiens cDNA clone IMAGE:897339 5' similar to gb:M22382
1900	14637	27346	3.77	6.8E-02	AF156673.1	NT	Homo sapiens putative hepatic transcription factor (WBSOR14) gene, complete cds
3097	15962	28503	1.19	6.8E-02	AA781986.1	EST_HUMAN	af75606.s1 Scores_testis_NHT Homo sapiens cDNA clone 1376628 3'
3097	15962	28504	1.19	6.8E-02	AA781986.1	EST_HUMAN	af75606.s1 Scores_testis_NHT Homo sapiens cDNA clone 1376628 3'
3097	15962	28505	1.19	6.8E-02	AA781986.1	EST_HUMAN	af75606.s1 Scores_testis_NHT Homo sapiens cDNA clone 1376628 3'
4516	17251		0.86	6.8E-02	BE141076.1	EST_HUMAN	MR0-HT0069-071069-001-c05 HT0069 Homo sapiens cDNA
6525	19291		0.6	6.8E-02	P20792	SWISSPROT	CELL-SURFACE RECEPTOR DAF-1 PRECURSOR
6799	19480		1.09	6.8E-02	BE061860.1	EST_HUMAN	RC1-BT0264-090300-017-409 BT0264 Homo sapiens cDNA
7180	19800	32839	8.73	6.8E-02	AL163288.2	NT	Homo sapiens chromosome 21 segment HS21(C008)
7584	20252	33358	0.63	6.8E-02	U116856.1	NT	Dichostelium discoideum myosin heavy chain kinase A (MHCK A) mRNA, complete cds
8186	20880	34017	5.01	6.8E-02	AJ248287.1	NT	Pyrococcus abyssi complete genome; segment 6/6
8186	20880	34018	5.01	6.8E-02	AJ248287.1	NT	Pyrococcus abyssi complete genome; segment 6/6
11873	25379		2.3	6.8E-02	T03214.1	EST_HUMAN	FB4A8 Fetal brain, Strategene Homo sapiens cDNA clone FB4A8 3' end similar to LINE-1
12001	24537		2.85	6.8E-02	AA758014.1	EST_HUMAN	ah6705.s1 Scores_testis_NHT Homo sapiens cDNA clone 1320705 3'
12551	24888		1.65	6.8E-02	AW975839.1	EST_HUMAN	EST387948 IMAGE:neurospores, MAGN Homo sapiens cDNA
12613	24920		3.06	6.8E-02	9910585	NT	Mus musculus latent TGF beta binding protein (Tgfb), mRNA
1519	14266		1.83	6.7E-02	AF115538.1	NT	Oncorhynchus mykiss TAP1 protein (OmyTAP1) mRNA, OmyTAP1*101 allele, complete cds
1886	14923	27333	2.27	6.7E-02	AI220285.1	EST_HUMAN	gg79e04.x1 Scores_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1841406 3'
3706	18459	28097	4.52	6.7E-02	P17278	SWISSPROT	HOMEOBOX PROTEIN HDX-D4 (CHOX-A)
7749	20445	33567	0.56	6.7E-02	X62805.1	NT	H.sapiens DNA for cAMP phosphodiesterase (exons 4-22)
7749	20445	33568	0.55	6.7E-02	X62805.1	NT	H.sapiens DNA for cAMP phosphodiesterase (exons 4-22)
8337	21030	34167	0.47	6.7E-02	AW082888.1	EST_HUMAN	xb61c11.x1 Scores_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2580788 3'
9500	22153	35333	0.69	6.7E-02	AW137359.1	EST_HUMAN	UIH-B11-ecr-g-01-0-U1.s1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2715433 3'
9500	22153	35334	0.69	6.7E-02	AW137359.1	EST_HUMAN	UIH-B11-ecr-g-01-0-U1.s1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2715433 3'
1348	14096	28771	1.07	6.6E-02	AF245116.1	NT	Drosophila melanogaster cactin mRNA, complete cds
2180	14909	27641	3.31	6.6E-02	AJ289241.1	NT	Mus musculus Capn12 gene for calpain 12, exons 1-21, three alternative transcripts
3456	16212	28885	10.57	6.6E-02	RF4306.1	EST_HUMAN	y18b10.s1 Scores placenta Nb24P Homo sapiens cDNA clone IMAGE:139579 3'
3471	16227	28881	2.89	6.6E-02	7108357	NT	Homo sapiens mesothelin (MSLN), transcript variant 1, mRNA
3471	16227	28882	2.59	6.6E-02	7108357	NT	Homo sapiens mesothelin (MSLN), transcript variant 1, mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4080	18905	28436	1.29	6.6E-02	AF260225.1	NT	Homo sapiens TESTIN 2 and TESTIN 3 genes, complete cds, alternatively spliced
4921	17649	30261	7.03	6.6E-02	Q61703	SWISSPROT	INTER-ALPHA-TRYPSIN INHIBITOR HEAVY CHAIN H2 PRECURSOR (ITI HEAVY CHAIN H2)
4921	17649	30262	7.03	6.6E-02	Q61703	SWISSPROT	INTER-ALPHA-TRYPSIN INHIBITOR HEAVY CHAIN H2 PRECURSOR (ITI HEAVY CHAIN H2)
6489	19258	32258	3.44	6.6E-02	X00411.1	NT	P. vulgaris mRNA for chalcone synthase
6701	19283	32286	0.56	6.6E-02	P25159	SWISSPROT	MATERNAL EFFECT PROTEIN STAUFIN
6701	19283	32287	0.56	6.6E-02	P25159	SWISSPROT	MATERNAL EFFECT PROTEIN STAUFIN
7847	20542	33670	1.81	6.6E-02	AF052572.1	NT	Homo sapiens chemokine receptor CXCR4 gene, promoter region and complete cds
8372	21065	34206	0.84	6.6E-02	AF000555.1	NT	Dicotyledon discoidium darlin (darA) gene, complete cds
8678	21370		0.53	6.6E-02	O60673	SWISSPROT	DNA POLYMERASE ZETA CATALYTIC SUBUNIT (HREV3)
8819	21511	34654	0.58	6.6E-02	9629198	NT	Human respiratory syncytial virus, complete genome
8819	21511	34655	0.58	6.6E-02	9629198	NT	Human respiratory syncytial virus, complete genome
9851	22501	35701	0.65	6.6E-02	A1459752.1	EST_HUMAN	967g06.x1 NCI_CGAP_L124 Homo sapiens cDNA clone IMAGE:2140468 3'
9887	22636	36846	1.96	6.6E-02	Y07848.1	NT	Homo sapiens EWS, gcr22, mp22 and barn22 genes
10022	22670		0.63	6.6E-02	11430559	NT	Homo sapiens vinculin (VCL), mRNA
10883	23563	36811	6.88	6.6E-02	BF374248.1	EST_HUMAN	MR1-SN0064-010800-006-a12 SN0064 Homo sapiens cDNA
11867	24461	37793	1.46	6.6E-02	AF052572.1	NT	Homo sapiens chemokine receptor CXCR4 gene, promoter region and complete cds
12442	24812		2.66	6.6E-02	9837991	NT	Mus musculus DIPB gene (Dipb), mRNA
12740	25008		1.38	6.6E-02	AF167430.1	NT	Rattus norvegicus cytochrome P450 2E1 (CYP2E1) gene, 5' flanking region
568	13349	25977	2.49	6.6E-02	BF027639.1	EST_HUMAN	601671046F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3964178 5'
966	13732	26396	1.32	6.5E-02	7706068	NT	Homo sapiens E2F-like protein (LOC51270), mRNA
1370	14118	26793	3.08	6.5E-02	U47624.1	NT	Xenopus laevis alpha(E)-catenin mRNA, complete cds
1728	14470	27169	1.77	6.5E-02	AE000784.1	NT	Aquifex acidicus section 68 of 109 of the complete genome
5471	18270	31162	2.03	6.5E-02	AA443961.1	EST_HUMAN	z46h12.a1 Scarses ovary tumor NihHOT Homo sapiens cDNA clone IMAGE:756743 3' similar to gb:M26038
6877	17953	30549	0.95	6.5E-02	U22861.1	NT	HLA CLASS II HISTOCOMPATIBILITY ANTIGEN, DR-3 BETA CHAIN (HUMAN);
9842	22493	35983	0.55	6.5E-02	BE963200.2	EST_HUMAN	Aerobacter vinelandii ATCC 9046 negative regulator MucB (mucB) gene, partial cds
9842	22493	35984	0.55	6.5E-02	BE963200.2	EST_HUMAN	601658817R1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3865637 3'
10363	23010	36225	0.48	6.5E-02	BF106300.1	EST_HUMAN	601658817R1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3865637 3'
10365	23232	36466	5.58	6.5E-02	AA195648.1	EST_HUMAN	601623511F1 NIH_MGC_77 Homo sapiens cDNA clone IMAGE:4043198 5'
11894	24463		3.73	6.5E-02	M21486.1	NT	zr2g05.a1 Scarses NIHMPu_S1 Homo sapiens cDNA clone IMAGE:865144 3'
12240	24691		4.66	6.5E-02	AF102993.1	NT	Rabbit microsomal epoxide hydrolase
561	13343	25970	2.09	6.4E-02	X94549.1	NT	Nectria haematococca kdsH related protein 2 (KRP2) gene, complete cds
3014	15780	28429	0.96	6.4E-02	6896923	NT	A. cereale precursor of peridinin-chlorophyll-protein (PCP) gene
4839	15780	28429	1.18	6.4E-02	6896923	NT	Mus musculus histone deacetylase 5 (Hdac5), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5383	18186	30850	1.67	6.4E-02	AI191956.1	EST_HUMAN	q607b01.x1 Soerae_testis_NHT Homo sapiens cDNA clone IMAGE:1738248 3' similar to contains LTR8.b3 LTR8 repetitive element;
5791	18582	31509	0.85	6.4E-02	7305186	NT	Mus musculus IFN-response element binding factor 1 (IREBF-1), mRNA
6022	18802	31763	4.21	6.4E-02	AF052733.1	NT	Helicoverpa glycines beta-1, 4-endoglucanase-1 precursor (HG-eng-1) gene, complete cds
6022	18802	31764	4.21	6.4E-02	AF052733.1	NT	Helicoverpa glycines beta-1, 4-endoglucanase-1 precursor (HG-eng-1) gene, complete cds
6308	19080	32065	0.82	6.4E-02	AI672886.1	EST_HUMAN	wf3g12.x1 Soerae_Dieckgraebe_cdon_NHCD Homo sapiens cDNA clone IMAGE:2346790 3'
6719	19634	32677	5.43	6.4E-02	BE974448.1	EST_HUMAN	601680425R2 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:3950503 3'
7360	20041	33119	0.84	6.4E-02	AL162757.2	NT	Neisseria meningitidis serogroup A strain Z2491 complete genome; segment 8/7
8234	20928		2.91	6.4E-02	6753323	NT	Mus musculus chaperonin subunit 6a (zeta) (Cct6a), mRNA
8563	21255	34392	3.42	6.4E-02	AA093305.1	EST_HUMAN	K1410.seq.F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'
9025	21715	34868	0.77	6.4E-02	AF150195.1	EST_HUMAN	AF150195 Human mRNA from cd34+ stem cells Homo sapiens cDNA clone CBDAIA10
9486	22139		0.55	6.4E-02	BE834063.1	EST_HUMAN	RC1-OT0083-150800-014-q06 OT0083 Homo sapiens cDNA
9617	22270	35457	1.73	6.4E-02	AB011126.1	NT	Homo sapiens mRNA for KIAA0554 protein, partial cds
10161	22809	36027	0.59	6.4E-02	AF087150.1	NT	Homo sapiens DNA topoisomerase II beta (TOP2B) gene, exons 16, 17, and 18
10161	22809	36028	0.59	6.4E-02	AF087150.1	NT	Homo sapiens DNA topoisomerase II beta (TOP2B) gene, exons 16, 17, and 18
							Human hereditary haemochromatosis region, Histone 2A-like protein gene, hereditary haemochromatosis (HLA-H) gene, RoRet gene, and sodium phosphate transporter (NPT3) gene, complete cds
11709	24304	37629	1.47	6.4E-02	U91328.1	NT	
							Human hereditary haemochromatosis region, Histone 2A-like protein gene, hereditary haemochromatosis (HLA-H) gene, RoRet gene, and sodium phosphate transporter (NPT3) gene, complete cds
11709	24304	37630	1.47	6.4E-02	U91328.1	NT	
12141	25288		2.7	6.4E-02	AF107890.1	NT	Homo sapiens mucin 5B (MUC5B) gene, partial cds
12188	24859	31085	2.47	6.4E-02	AJ277174.1	NT	Drosophila melanogaster mRNA for mod(mdg4)51.4 protein
							Mus musculus major histocompatibility locus class III regions Hsc70t gene, partial cds; smRNP, G7A, NG23, Muts homolog, CLCP, NG24, NG25, and NG26 genes, complete cds; and unknown genes
1740	14491	27191	2.57	6.3E-02	AF106905.1	NT	HEAT SHOCK PROTEIN 70 HOMOLOG
3690	18344		2.38	6.3E-02	P37092	SWISSPROT	
6045	18825	31788	1.18	6.3E-02	BF210736.1	EST_HUMAN	601873316F1 NIH_MGC_54 Homo sapiens cDNA clone IMAGE:4097499 5'
7142	19629		0.82	6.3E-02	X97699.1	NT	H. sapiens gene encoding La antigen
9191	21881	35028	1.04	6.3E-02	AJ243916.1	NT	Drosophila melanogaster Dornina gene, exons 1-3
9913	22862	35768	2.84	6.3E-02	AB010192.1	NT	Hepatitis G virus RNA for polyprotein (NS5A region), partial cds, strain: CMR-152
10171	22819		0.85	6.3E-02	AV698070.1	EST_HUMAN	AV698070 GKC Homo sapiens cDNA clone GKCAHE01 5'
10615	18825	31786	2.86	6.3E-02	BF210736.1	EST_HUMAN	601873316F1 NIH_MGC_64 Homo sapiens cDNA clone IMAGE:4097499 5'
4224	18905	29590	2.81	6.2E-02	AL101572.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 68

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4304	17043		1.02	6.2E-02	AF271235.1	NT	Rattus norvegicus differentiation-associated Na-dependent inorganic phosphate cotransporter (DNPI) mRNA, complete cds
4542	17277		6.31	6.2E-02	Q62191	SWISSPROT	82 KD RO PROTEIN (SJOEGREN SYNDROME TYPE A ANTIGEN (SS-A)) (RO(SS-A)) (RO62)
6698	19615	32656	0.85	6.2E-02	D46530.1	NT	Spirulina platensis DNA for adenylate cyclase, complete cds
7527	20198	33292	1.03	6.2E-02	U41453.1	NT	Rattus norvegicus PKC binding protein and substrate mRNA, complete cds
8846	25429		0.6	6.2E-02	M61101.1	NT	Porcine group C rotavirus (strain Cowden) outer membrane protein (VP7) mRNA, complete cds
9243	21922	35082	0.52	6.2E-02	AA78450.1	EST_HUMAN	af20a08.s1 Soares_t04_f08_9w Homo sapiens cDNA clone IMAGE:1032178 3'
9390	22042	35214	1.65	6.2E-02	6677898	NT	Mus musculus stromal cell derived factor receptor 2 (Sdrf2), mRNA
11095	23765	37039	1.96	6.2E-02	AF217490.1	NT	Homo sapiens fragile 16D oxidoreductase (FOR) gene, exons 8, 9, and partial cds
11320	24011	37315	1.53	6.2E-02	AJ242735.1	NT	Metarhizium anisopliae mRNA for Chymotrypsin (chy1 gene)
11965	24449	37791	1.74	6.2E-02	AF200359.1	NT	Rattus norvegicus UDP-glucose glycoprotein:glucosyltransferase precursor (Uggf) mRNA, complete cds
11989	25405		13.39	6.2E-02	AE000750.1	NT	Aquifex aeolicus section 82 of 109 of the complete genome
12394	24782	31037	2.5	6.2E-02	BF112039.1	EST_HUMAN	787808.x1 Soares_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3523815 3' similar to TR:Q9Y4S6 Q9Y4S6 HYPOTHETICAL 30.3 KD PROTEIN. [1];
249	13058	25697	5.59	6.1E-02	D16471.1	NT	Human mRNA, Xq terminal portion
3972	16721		2.29	6.1E-02	U73325.1	NT	Arabidopsis thaliana K+ inward rectifying channel protein (AKCT) gene, complete cds
6023	18803		1.4	6.1E-02	4507070	NT	Homo sapiens SW/ISNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 3 (SMARCA3) mRNA
8161	20855	33988	3.75	6.1E-02	X6288.1	NT	H. sapiens mRNA for B-HLH DNA binding protein
8559	21251	34398	0.57	6.1E-02	BE971853.1	EST_HUMAN	601651086R1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:3834604 3'
8559	21251	34399	0.57	6.1E-02	BE971853.1	EST_HUMAN	601651086R1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:3834604 3'
10630	23323	36560	4.91	6.1E-02	BE179843.1	EST_HUMAN	IL3-HT0618-110500-136-C08 HT0618 Homo sapiens cDNA
11802	24446	37767	1.27	6.1E-02	AB025333.1	NT	Epilobium burgeri mRNA for RNA polymerase III largest subunit, partial cds
11945	25323		2.27	6.1E-02	X70969.1	NT	S. japonicum mRNA for serine-enzyme
12633	24933		5.61	6.1E-02	AL163207.2	NT	Homo sapiens chromosome 21 segment HS21C007
96	12822	25559	0.76	6.0E-02	AA188730.1	EST_HUMAN	zp78c04.r1 Stralagene HeLa cell s3 937216 Homo sapiens cDNA clone IMAGE:626310 5'
96	12822	25560	0.76	6.0E-02	AA188730.1	EST_HUMAN	zp78c04.r1 Stralagene HeLa cell s3 937216 Homo sapiens cDNA clone IMAGE:626310 5'
1239	13988	26855	1.54	6.0E-02	AE001777.1	NT	Thermoplasma maritima section 89 of 136 of the complete genome
2682	15391	28130	1.09	6.0E-02	AW968848.1	EST_HUMAN	EST1380924 IMAGE resequences, MAGJ Homo sapiens cDNA
2775	15480		1.62	6.0E-02	AB031289.1	NT	Mesocricetus auratus mitochondrial DNA, NADH dehydrogenase subunit 4, tRNA-Gln, tRNA-Phe, tRNA-Met, ATPase subunit 6, and NADH dehydrogenase subunit 2
2837	12922	25559	0.9	6.0E-02	AA188730.1	EST_HUMAN	zp78c04.r1 Stralagene HeLa cell s3 937216 Homo sapiens cDNA clone IMAGE:626310 5'
2837	12922	25560	0.9	6.0E-02	AA188730.1	EST_HUMAN	zp78c04.r1 Stralagene HeLa cell s3 937216 Homo sapiens cDNA clone IMAGE:626310 5'

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Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3223	15986	28639	1.48	6.0E-02	AA372376.1	EST_HUMAN	EST184286 Colon adenocarcinoma IV Homo sapiens cDNA 6' end similar to tissue-specific protein
3223	15986	28640	1.48	6.0E-02	AA372376.1	EST_HUMAN	EST184286 Colon adenocarcinoma IV Homo sapiens cDNA 5' end similar to tissue-specific protein
3625	16378		0.72	6.0E-02	BE084443.2	EST_HUMAN	601658150R1 NIH_MGC_88 Homo sapiens cDNA clone IMAGE:3876060 3'
5037	17756	30370	0.68	6.0E-02	AF146738.1	NT	Rattus norvegicus testis specific protein mRNA, complete cds
5313	18117		0.94	6.0E-02	AW370211.1	EST_HUMAN	RC3-BT0253-011198-013-004 BT0253 Homo sapiens cDNA
6122	18900	31888	0.77	6.0E-02	AI807637.1	EST_HUMAN	wf48h05.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2358873 3' similar to contains L1.L1 L1 L1 repetitive element;
6891	17867	30324	3.07	6.0E-02	5174698	NT	Homo sapiens stimulated trans-acting factor (80 kDa) (STAF50) mRNA
6891	17967	30525	3.07	6.0E-02	5174698	NT	Homo sapiens stimulated trans-acting factor (80 kDa) (STAF50) mRNA
7088	19777	32842	2.33	6.0E-02	BF382349.1	EST_HUMAN	601816274F2 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4049226 5'
7580	20249	33355	2.13	6.0E-02	AI204275.1	EST_HUMAN	qf58b08.x1 Soares_testis_NIT Homo sapiens cDNA clone IMAGE:1754189 3'
8321	21014		0.54	6.0E-02	11498495	NT	Reclinomonas americana mitochondrion, complete genome
9172	21842	35007	1.17	6.0E-02	AI623167.1	EST_HUMAN	ts78a06.x1 NCI_CGAP_G08 Homo sapiens cDNA clone IMAGE:2237362 3'
9172	21842	35008	1.17	6.0E-02	AI623167.1	EST_HUMAN	ts78a06.x1 NCI_CGAP_G08 Homo sapiens cDNA clone IMAGE:2237362 3'
9306	21973	35147	1.66	6.0E-02	AJ245365.1	NT	Acipenser baeri partial IGLV gene for immunoglobulin light chain variable region, exons 1-2
9306	21973	35148	1.66	6.0E-02	AJ245365.1	NT	Acipenser baeri partial IGLV gene for immunoglobulin light chain variable region, exons 1-2
9805	22456	35659	0.5	6.0E-02	AA309797.1	EST_HUMAN	EST180654 Jurkat T-cells V Homo sapiens cDNA 5' end similar to heat shock protein 1, 60 kDa-like
9805	22456	35660	0.5	6.0E-02	AA309797.1	EST_HUMAN	EST180654 Jurkat T-cells V Homo sapiens cDNA 5' end similar to heat shock protein 1, 60 kDa-like
11306	23985		1.69	6.0E-02	AA128386.1	EST_HUMAN	zn87c08.l1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone IMAGE:865166 5' similar to gb2X69181 60S RIBOSOMAL PROTEIN L31 (HUMAN);
12187	24658	31064	2.19	6.0E-02	11431702	NT	Homo sapiens DNA-dependent protein kinase catalytic subunit-interacting protein 2 (KIP2), mRNA
12564	24804		2.31	6.0E-02	AI809273.1	EST_HUMAN	wf68h03.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2358873 3' similar to TR:O60288
223	13036	26671	3.87	6.0E-02	AW934719.1	EST_HUMAN	RC1-DT001-280100-012-010 DT0001 Homo sapiens cDNA
2882	15748	28398	2.89	6.0E-02	AF180289.1	NT	Mus musculus p53 tumor suppressor gene, exon 10 and 11, partial cds; alternatively spliced
4817	17548	30173	1	6.0E-02	AF006304.1	NT	Saccharomyces cerevisiae protein tyrosine phosphatase (PTP3) gene, complete cds
5123	17841	30457	0.73	6.0E-02	AW028748.1	EST_HUMAN	wf34e02.x1 NCI_CGAP_Ov18 Homo sapiens cDNA clone IMAGE:2531450 3' similar to TR:O65386
5123	17841	30458	0.73	6.0E-02	AW028748.1	EST_HUMAN	O65386 F12F1.20 PROTEIN.;
8515	21207	34350	1.68	6.0E-02	9055249	NT	Mus musculus trophoblast related homeobox 5 (Drosophila) (irx5), mRNA
9351	20422		0.8	6.0E-02	BF242748.1	EST_HUMAN	601877609F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:4105894 5'

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10895	23378		3.2	5.8E-02	0679870	NT	Mus musculus follistatin-like (Foll), mRNA
10944	23023	30872	1.44	5.8E-02	11433356	NT	Homo sapiens nirein (LOC51198), mRNA
11544	24144		1.59	5.8E-02	AJ240733.1	NT	Gallus gallus HKO9 telomere junction
912	13679		5.18	5.8E-02	D90110.1	NT	Thiobacillus ferrooxidans merC, merA genes and URF-1
2804	15632		0.96	5.8E-02	AJ223621.1	NT	Populus trichocarpa GCoACT1 gene, exon 1 to exon 5
4322	17081	29087	4.9	5.8E-02	AW061927.1	EST_HUMAN	wx24c02.x1 NC1 CGAP_Kd11 Homo sapiens cDNA clone IMAGE:2544578 3'
4322	17081	29088	4.9	5.8E-02	AW061927.1	EST_HUMAN	wx24c02.x1 NC1 CGAP_Kd11 Homo sapiens cDNA clone IMAGE:2544578 3'
4510	17245	29879	4.95	5.8E-02	AI247505.1	EST_HUMAN	qh56f01.x1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:1848697 3' similar to gb:M13142 COAGULATION FACTOR XI PRECURSOR (HUMAN);
4510	17245	29880	4.95	5.8E-02	AI247505.1	EST_HUMAN	qh56f01.x1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:1848697 3' similar to gb:M13142 COAGULATION FACTOR XI PRECURSOR (HUMAN);
4535	17270		2.62	5.8E-02	AF060284.1	NT	Gallus gallus tyrosine kinase JAK1 (JAK1) mRNA, complete cds
7578	20247	33362	2.99	5.8E-02	M99150.1	NT	Human polymorphic microsatellite DNA
7578	20247	33353	2.99	5.8E-02	M99150.1	NT	Human polymorphic microsatellite DNA
8565	21257	34394	0.67	5.8E-02	AL163283.2	NT	Homo sapiens chromosome 21 segment HS21C083
12084	24500		1.79	5.8E-02	AF220177.1	NT	Drosophila melanogaster male fruitless type-A (fru) mRNA, complete cds
12373	25398		7.08	5.8E-02	AJ604269.1	EST_HUMAN	no75et11.s1 NC1 CGAP_AA1 Homo sapiens cDNA clone IMAGE:1112884 3'
3053	15819	28463	1.36	5.7E-02	AD081644.1	EST_HUMAN	ou63605.s1 NC1 CGAP_Br2 Homo sapiens cDNA clone IMAGE:1632495 3' similar to WP:C37A2.2
3068	15834	28478	1.29	5.7E-02	AF119117.1	NT	CE08611;
3694	16448		0.97	5.7E-02	AF001292.1	NT	Homo sapiens dopamine transporter (SLC6A3) gene, complete cds
3783	16536	29173	2.45	5.7E-02	AW066791.1	EST_HUMAN	Chromomus thomasi humoral globin VIIA.1 (ctt-7A.1), globin 9.1 (ctt-9.1), globin II-beta (ctt-2beta), non-functional globin XII (ctt-13RT), globin XII (ctt-12) and globin XI (ctt-11) genes, complete cds
4037	17371		1.01	5.7E-02	M95096.1	NT	EST378865 IMAGE resequences, MAGI Homo sapiens cDNA
7438	20115	33203	0.69	5.7E-02	D78003.1	NT	Bos taurus lysozyme gene (cow 3), complete cds
7438	20115	33204	0.69	5.7E-02	D78003.1	NT	Xenopus laevis mRNA for fourth component of complement, complete cds
8055	20749	33980	1.42	5.7E-02	AJ296090.1	NT	Xenopus laevis mRNA for fourth component of complement, complete cds
9750	22401	35608	0.64	5.7E-02	6681260	NT	Rattus norvegicus mRNA for potassium channel, alpha subunit (Kv9.2 gene)
11143	23810	37080	4.42	5.7E-02	AI752895.1	EST_HUMAN	Mus musculus ec2 oncogene (Ec2), mRNA
11143	23810	37091	4.42	5.7E-02	AI752895.1	EST_HUMAN	cn18b09.y1 Normal Human Trabecular Bone Cells Homo sapiens cDNA clone NHTBC_cn18b09 random
11321	24012		1.69	5.7E-02	AL163303.2	NT	cn18b09.y1 Normal Human Trabecular Bone Cells Homo sapiens cDNA clone NHTBC_cn18b09 random
12285	25213		7.24	5.7E-02	D50320.1	NT	Homo sapiens chromosome 21 segment HS21C103
							Pig DNA for SPAL-2, complete cds



Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12515	25283		3.18	5.7E-02	AF217490.1	NT	Homo sapiens fragile 180 oxidoreductase (FOR) gene, exons 8, 9, and partial cds
12650	25387		2.61	5.7E-02	AF261280.1	NT	Pan troglodytes apolipoprotein-E gene, complete cds
1518	14265	26951	1.57	5.8E-02	AF084455.1	NT	Hydrocotyle rotundifolia ribosomal protein L16 (rp16) gene, intron; chloroplast gene for chloroplast product
4595	17330	26957	1.12	5.8E-02	AB013100.1	NT	Lycopodium obscurum LE-ACS8 mRNA for 1-aminocyclopropane-1-carboxylate synthase, complete cds
4648	17382	30014	1.46	5.8E-02	AA200589.1	EST_HUMAN	z44501.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:700416 3'
6562	19327	32334	6.57	5.8E-02	AW172708.1	EST_HUMAN	x02c10.x1 NCI_CGAP_U2 Homo sapiens cDNA clone IMAGE:2650050 3' similar to TR:084979 O84979 KIA0085 PROTEIN.
6791	19535	32563	1.25	5.8E-02	AA088182.1	EST_HUMAN	cd47712.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1371119 3' similar to contains Alu repetitive element-containing element L1 repetitive element.
7051	19742	32804	3.05	5.8E-02	BE006001.1	EST_HUMAN	QV0-BN0147-290400-214-g07 BN0147 Homo sapiens cDNA
7063	19764	32819	0.89	5.8E-02	A083738.1	EST_HUMAN	w23405.x1 NCI_CGAP_Bm53 Homo sapiens cDNA clone IMAGE:2559089 3' similar to gb:X08408 RAF PROTO-ONCOGENE SERINE/THREONINE-PROTEIN KINASE (HUMAN);
7725	20388	33502	0.86	5.8E-02	A183583.1	EST_HUMAN	q084g11.x1 Soares testis NHT Homo sapiens cDNA clone IMAGE:1734308 3'
8701	21393	34539	2.88	5.8E-02	BE542663.1	EST_HUMAN	601067158F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3463279 5'
8701	21393	34540	2.88	5.8E-02	BE542663.1	EST_HUMAN	601067158F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3463279 5'
9712	22363	35581	1.09	5.8E-02	AA482864.1	EST_HUMAN	nf49d07.s1 NCI_CGAP_Alv1 Homo sapiens cDNA clone IMAGE:923245 similar to TR:G769859 G769859 LAMINA ASSOCIATED POLYPEPTIDE 1C.
11556	24155		2.35	5.8E-02	AF260225.1	NT	Homo sapiens TESTIN 2 and TESTIN 3 genes, complete cds, alternatively spliced
2680	15370	28108	6.8	5.5E-02	X07869.1	NT	H.sapiens gene encoding La autoantigen
3209	15972	28625	3.93	5.5E-02	6755501	NT	Mus musculus SH3 domain protein 1B (Sh3d1B), mRNA
4191	16932	29581	1	5.5E-02	L41581.1	NT	Gallid herpesvirus mRNA fragment
5573	18370	31281	3.05	5.5E-02	Q01174	SWISSPROT	TROPOMYOSIN ALPHA CHAIN, NON MUSCLE
5935	18370	31281	3.58	5.5E-02	Q01174	SWISSPROT	TROPOMYOSIN ALPHA CHAIN, NON MUSCLE
7277	19981	33038	2	5.5E-02	6755802	NT	Mus musculus tufalin 1 (Tuf1), mRNA
8019	20714	33845	0.83	5.5E-02	AF170911.1	NT	Homo sapiens sodium-dependent vitamin C transporter 1 (SVCT1), mRNA, complete cds
8019	20714	33846	0.83	5.5E-02	AF170911.1	NT	Homo sapiens sodium-dependent vitamin C transporter 1 (SVCT1), mRNA, complete cds
9555	22208	35392	0.6	5.5E-02	10947034	NT	Homo sapiens eIF4E-transporter (4E-T), mRNA
9555	22208	35393	0.6	5.5E-02	10947034	NT	Homo sapiens eIF4E-transporter (4E-T), mRNA
9650	22302	35497	1.32	5.5E-02	U08492.1	NT	Mus musculus second IL11 receptor alpha chain (IL11Ra2) gene, exons 1 and 2
10943	23622	36871	7.26	5.5E-02	U09771.1	NT	Citrobacter freundii DSM 30040 cyclopropane fatty acid synthase (cfa) gene, partial cds, dihydroxyacetone kinase (dhak), glycerol dehydrogenase (dhad), transcriptional activator (dhaf), 1,3-propanediol dehydrogenase (dhaf), glycerol dehydratase (dhaf).>

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12797	25349	30604	1.49	5.6E-02	11421332	NT	Homo sapiens hypothetical protein SIRP-b2 (SIRP-b2), mRNA
3019	15785		0.91	5.4E-02	AJ277488.1	NT	Oryza sativa rbb13-1 gene for putative Bowman Birk trypsin inhibitor
3416	17885		5.78	5.4E-02	BE073488.1	EST_HUMAN	RC5-BT0558-140200-012-C03 BT0558 Homo sapiens cDNA
3891	16641	29281	0.76	5.4E-02	U85908.1	NT	Hirudo medicinalis SNAP-28 homolog mRNA, complete cds
8024	20719		0.89	5.4E-02	Z99116.1	NT	Bacillus subtilis complete genome (section 13 of 21); from 2395261 to 2613730
8999	21659	34809	0.55	5.4E-02	AF260225.1	NT	Homo sapiens TESTIN 2 and TESTIN 3 genes, complete cds, alternatively spliced
10537	23234	36487	1.82	5.4E-02	AU120889.1	EST_HUMAN	AU120889 HEMBB1 Homo sapiens cDNA clone HEMBB1001630 5'
10598	23292	36530	2.01	5.4E-02	U20790.1	NT	Neurospora crassa ubiquitin-cytochrome c oxidoreductase subunit VIII (QCR8) mRNA, complete cds
11132	23800	37076	1.32	5.4E-02	BF371289.1	EST_HUMAN	RC8-FN0112-190700-021-D08 FN0112 Homo sapiens cDNA
11132	23800	37077	1.32	5.4E-02	BF371289.1	EST_HUMAN	RC8-FN0112-190700-021-D08 FN0112 Homo sapiens cDNA
1031	13791	26450	1.28	5.3E-02	AW391248.1	EST_HUMAN	QV0-ST0213-021299-062-a09 ST0213 Homo sapiens cDNA
1031	13791	26451	1.28	5.3E-02	AW391248.1	EST_HUMAN	QV0-ST0213-021299-062-a09 ST0213 Homo sapiens cDNA
1496	14242	26929	14.72	5.3E-02	T94759.1	EST_HUMAN	ye37712.1 Stratagene lung (#937210) Homo sapiens cDNA clone IMAGE:118951 5' similar to gb:K01508 HLA CLASS II HISTOCOMPATIBILITY ANTIGEN, DP(1) ALPHA CHAIN (HUMAN);
2501	15218	27981	2.47	5.3E-02	AJ276408.1	NT	Pseudomonas putida tlgS gene
2943	15709	28390	0.95	5.3E-02	M58417.1	NT	Drosophila melanogaster laminin B2 gene, complete cds
2943	15709	28391	0.95	5.3E-02	M58417.1	NT	Drosophila melanogaster laminin B2 gene, complete cds
3150	15913	28558	5.51	5.3E-02	AJ276408.1	NT	Pseudomonas putida tlgS gene
5028	17749	30391	6.34	5.3E-02	M80463.1	NT	Mus musculus caudal type homeobox-1 (Cdx-1) gene, complete cds
5236	18042	30670	1.98	5.3E-02	AE000527.1	NT	Helicobacter pylori 26695 section 5 of 134 of the complete genome
5236	18042	30671	1.98	5.3E-02	AE000527.1	NT	Helicobacter pylori 26695 section 5 of 134 of the complete genome
6785	19529	32556	5.01	5.3E-02	9695413	NT	Lymphocytis disease virus 1, complete genome
6982	19885	32733	1	5.3E-02	U32832.1	NT	Haemophilus influenzae Rd section 147 of 163 of the complete genome
7280	19844		2.06	5.3E-02	S78221.1	NT	nuclear protein TIF1 isoform [mice, mRNA, 4053 nt]
7777	20399	33514	0.65	5.3E-02	P38742	SWISSPROT	HYPOTHETICAL 130.0 KD PROTEIN IN SNF8-SPO11 INTERGENIC REGION
8304	20998		0.7	5.3E-02	U10098.1	NT	Mus musculus 128/Sv cystatin C (cst3) gene, complete cds
9023	21713	34887	1.56	5.3E-02	X03127.1	NT	Podospora anserina mitochondrial epsilon-sen DNA
10032	22680	35897	0.62	5.3E-02	AB022805.1	NT	Homo sapiens hCNT1b mRNA for mRNA (guanine-7-methyltransferase, complete cds
10032	22680	35898	0.62	5.3E-02	AB022805.1	NT	Homo sapiens hCNT1b mRNA for mRNA (guanine-7-methyltransferase, complete cds
10158	22804		0.63	5.3E-02	Y07907.1	NT	D. rerio mRNA for zp-23 POU gene, splice variant (neurula, 9-16 hpf and postconitogenesis, 20-28 hpf)
10230	22878	36080	0.7	5.3E-02	X88432.1	NT	B. rerio pou(c) mRNA for transcription factor

Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12776	25030	30984	1.43	5.3E-02	AF276815.1	NT	Branchiostoma floridae homeodomain-containing protein Hox13 (Hox13) gene, exon 2 and partial cds
2283	15008		180.56	5.2E-02	5031908	NT	Homo sapiens meprin A, alpha (PABA, peptide hydrolase) (MEP1A) mRNA
3112	15877	28516	2.34	5.2E-02	AJ277681.1	NT	Homo sapiens partial LMO1 gene for LIM domain only 1 protein, exon 1
3112	15877	28517	2.34	5.2E-02	AJ277681.1	NT	Homo sapiens partial LMO1 gene for LIM domain only 1 protein, exon 1
3919	16869	29310	1.23	5.2E-02	AF236101.1	NT	Arabidopsis thaliana putative dicarboxylate diiron protein (Ctd1) mRNA, complete cds
3921	16871		1.19	5.2E-02	6671757	NT	Mus musculus cytokine inducible SH2-containing protein 3 (Cist3), mRNA
4245	16986	29609	3.02	5.2E-02	U07132.1	NT	Human steroid hormone receptor Nsr-1 mRNA, complete cds
5053	17772		0.9	5.2E-02	AA297940.1	EST_HUMAN	EST11352 Uterus Homo sapiens cDNA 5' and
5828	18617	31548	0.61	5.2E-02	U14731.1	NT	Saccharomyces cerevisiae Cdc54p (CDC54) gene, complete cds
6016	18797		0.96	5.2E-02	AI830965.1	EST_HUMAN	wf80e04.x1 NCI_OGAP_Lym12 Homo sapiens cDNA clone IMAGE:2409150 3' similar to contains MER15.b1 MER15 repetitive element:
7174	19880	32832	3.13	5.2E-02	P36322	SWISSPROT	DNA POLYMERASE PROCESSIVITY FACTOR (POLYMERASE ACCESSORY PROTEIN) (PAP) (DNA-BINDING GENE 18 PROTEIN)
8065	20789		2.19	5.2E-02	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
9629	22282	35472	1.87	5.2E-02	D10627.1	NT	Turnip mosaic virus genomic RNA for Capsid protein, complete cds
9629	22282	35473	1.87	5.2E-02	D10627.1	NT	Turnip mosaic virus genomic RNA for Capsid protein, complete cds
12414	24795		1.83	5.2E-02	Q03030	SWISSPROT	OXALOACETATE DECARBOXYLASE ALPHA CHAIN
2364	15088		1.17	5.1E-02	AL134071.1	EST_HUMAN	DKFZp547D073_r1 547 (synonym: hfbt1) Homo sapiens cDNA clone DKFZp647D073 5'
4179	16919	28547	1.03	5.1E-02	AE001301.1	NT	Chlamydia trachomatis section 28 of 87 of the complete genome
4980	17685		49.38	5.1E-02	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
6676	19339	32350	0.72	5.1E-02	AF280369.1	NT	HIV-1 patient 96 from Italy protease (pol) gene, complete cds
6780	17929	30584	1.44	5.1E-02	BF378625.1	EST_HUMAN	QVQ-UM0051-250800-350-508 UM0051 Homo sapiens cDNA
8151	20845	33975	0.84	5.1E-02	M28434.1	NT	Human hypoxanthine phosphoribosyltransferase (HPR1) gene, complete cds
8151	20845	33976	0.84	5.1E-02	M28434.1	NT	Human hypoxanthine phosphoribosyltransferase (HPR1) gene, complete cds
8245	20939	34076	1.48	5.1E-02	AJ131966.1	NT	Spodoptera littoralis mRNA for 3-dehydrodione 3beta-reductase
8783	21475	34622	0.89	5.1E-02	P02533	SWISSPROT	KERATIN, TYPE I CYTOSKELETAL 14 (CYTOKERATIN 14) (K14) (CK 14)
8783	21475	34623	0.58	5.1E-02	P02533	SWISSPROT	KERATIN, TYPE I CYTOSKELETAL 14 (CYTOKERATIN 14) (K14) (CK 14)
9709	22360	35556	6.2	5.1E-02	AF012898.1	NT	Candida albicans protein phosphatase Sad1 homolog (SSD1) gene, complete cds
10082	22730	35945	1.89	5.1E-02	P40603	SWISSPROT	ANTER-SPECIFIC PROLINE-RICH PROTEIN APG (PROTEIN CEX)
10733	23420	36861	2.44	5.1E-02	AF083930.1	NT	Homo sapiens ES18 mRNA, partial cds
10733	23420	36862	2.44	5.1E-02	AF083930.1	NT	Homo sapiens ES18 mRNA, partial cds
11620	24217	37540	1.3	5.1E-02	AL139076.2	NT	Campylobacter jejuni NCTC11168 complete genome, segment 3/9
12421	24797		2.56	5.1E-02	AF062467.1	NT	Cucumis melo polygalacturonase precursor (MPC3) mRNA, complete cds

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12679	24988		1.41	5.1E-02	AA534104.1	EST_HUMAN	1173162.s1 NCI_CGAP_P10 Homo sapiens cDNA clone IMAGE:988139
470	13286	25894	1.84	5.0E-02	AF088004.1	NT	Mus musculus fatty acid amide hydrolase gene, exon 10
1182	13934	26589	6.54	5.0E-02	Z09104.1	NT	Bacillus subtilis complete genome (section 1 of 21): from 1 to 213080
1983	14719	27438	3.91	5.0E-02	P02310	SWISSPROT	SALIVARY ACIDIC PROLINE-RICH PHOSPHOPROTEIN 1/2 PRECURSOR (PRP-1/PRP-3) (PRP-2/PRP-4) (PIF-F/PIF-S) (PROTEIN A/PROTEIN C) [CONTAINS: PEPTIDE P-C]
2821	13731	26397	1.28	5.0E-02	U72742.1	NT	Oryctolagus cuniculus UDP-glucuronosyltransferase (UGT2B13) mRNA, complete cds
3332	16092		1.42	5.0E-02	7305610	NT	Mus musculus Unc-51 like kinase 2 (C. elegans) (Ulk2), mRNA
3582	16337		1.04	5.0E-02	U32782.1	NT	Haemophilus influenzae Rd section 97 of 163 of the complete genome
3672	16425	28066	5.83	5.0E-02	U12789.2	NT	Antheraea pernyi period clock protein homolog mRNA, complete cds
4770	17502		0.99	5.0E-02	P40232	SWISSPROT	CASEIN KINASE II BETA CHAIN (CK II)
6039	18819	31780	0.95	5.0E-02	AF098284.1	NT	Gallus gallus tyrosine kinase JAK1 (JAK1) mRNA, complete cds
6216	18990		1.3	5.0E-02	AJ242625.1	NT	Mus musculus Drmp-1 gene, exons 1-6
7437	20114	33202	12.48	5.0E-02	P35616	SWISSPROT	NEUROFILAMENT TRIPLET L PROTEIN (NEUROFILAMENT LIGHT POLYPEPTIDE) (NFL)
10100	22748	35863	1.28	5.0E-02	AF305238.1	NT	Mus musculus Fas-interacting serine/threonine kinase 3 (Fas3) mRNA, complete cds
10321	23167		0.45	5.0E-02	BF213260.1	EST_HUMAN	601844753F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:4070101 5'
11473	24074	37383	2.5	5.0E-02	U67800.1	NT	Methanococcus jannaschii section 142 of 150 of the complete genome
11956	25249		3.5	5.0E-02	Q04047	SWISSPROT	NO-ON-TRANSIENT A PROTEIN
217	13028		24.03	4.9E-02	M14230.1	NT	Chicken 28-kDa vitamin D-dependent calcium-binding protein (CaBP-28) mRNA, complete cds
360	13158	25800	2.66	4.9E-02	AF275048.1	NT	Homo sapiens ABCA1 (ABCA1) gene, complete cds
360	13158	25801	2.68	4.9E-02	AF275948.1	NT	Homo sapiens ABCA1 (ABCA1) gene, complete cds
3282	16043	28692	2.53	4.9E-02	P34258	SWISSPROT	ATROPHIN-1 (DENTATORUBRAL-PALLIDOLUTYSIAN ATROPHY PROTEIN)
3558	16311		0.69	4.9E-02	AA189940.1	EST_HUMAN	zq48a12.s1 Stratagene hNT neuron (#837233) Homo sapiens cDNA clone IMAGE:632928 3' similar to contains Alu repetitive element; contains element MSR1 repetitive element;
3579	16334	28978	0.99	4.9E-02	AA400914.1	EST_HUMAN	z178a03.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:728428 3'
3579	16334	28979	0.99	4.9E-02	AA400914.1	EST_HUMAN	z178a03.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:728428 3'
4788	17519	30141	1.91	4.9E-02	AW167821.1	EST_HUMAN	xg56g10.x1 NCI_CGAP_U14 Homo sapiens cDNA clone IMAGE:2632386 3'
4788	17519	30142	1.91	4.9E-02	AW167821.1	EST_HUMAN	xg56g10.x1 NCI_CGAP_U14 Homo sapiens cDNA clone IMAGE:2632386 3'
5286	18091	30751	1.9	4.9E-02	L00122.1	NT	Rat elastase II gene, exon 6
5286	18091	30752	1.9	4.9E-02	L00122.1	NT	Rat elastase II gene, exon 6
7042	19733	32783	0.91	4.9E-02	AE000980.1	NT	Archaeoglobus fulgidus section 127 of 172 of the complete genome
8513	21205		0.8	4.9E-02	AE002309.1	NT	Chlamydia muridarum, section 40 of 85 of the complete genome
8852	21344	34489	0.71	4.9E-02	AL161569.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 59
10191	22839	36054	0.48	4.9E-02	P19532	SWISSPROT	TRANSCRIPTION FACTOR E3
10494	23140	36366	0.46	4.9E-02	AL163218.2	NT	Homo sapiens chromosome 21 segment HS21C018

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11378	23985	37285	3.22	4.9E-02	AF008303.1	NT	Homo sapiens prepro placental TGF-beta gene, complete cds
12345	24752		1.77	4.9E-02	8923880	NT	Homo sapiens CS box-containing WD protein (LOC55884), mRNA
12598	24912		3.41	4.9E-02	M18364.1	NT	Human gamma-B-crystallin (gamma 1-2) and gamma-C-crystallin (gamma 2-1) genes, complete cds
321	13123	25760	1.54	4.8E-02	D10471.1	NT	Human mRNA, Xq terminal portion
322	13123	25760	3.94	4.8E-02	D10471.1	NT	Human mRNA, Xq terminal portion
476	13262	25899	0.96	4.8E-02	AF003100.1	NT	Arabidopsis thaliana AP2 domain containing protein RAP2.7 mRNA, partial cds
2271	14987	27735	1.82	4.8E-02	W51983.1	EST_HUMAN	z46b02.s1 Soares_senscent_fibroblasts NbHSF Homo sapiens cDNA clone IMAGE:325811 3' similar to gb:U30638 LUPUS KU AUTOANTIGEN PROTEIN P88 (HUMAN);
3203	15086	28620	2.1	4.8E-02	X17144.1	NT	Tetrahymena rostrata histone H3II and histone H4II intergenic DNA
4823	17358	30478	1.15	4.8E-02	Z54280.1	NT	S. sacrofa gene for skeletal muscle ryanodine receptor
5144	17863	30478	1.03	4.8E-02	11893131	NT	Homo sapiens DKFZP434D222 protein (RENT2), mRNA
5144	17863	30479	1.03	4.8E-02	11893131	NT	Homo sapiens DKFZP434D222 protein (RENT2), mRNA
8037	20732	33864	1.32	4.8E-02	AW389497.1	EST_HUMAN	MR2-ST0128-221099-012-b02 ST0128 Homo sapiens cDNA
9027	21717	34870	0.95	4.8E-02	AJ001398.1	NT	Fugu rubripes rps24 gene
9027	21717	34871	0.95	4.8E-02	AJ001398.1	NT	Fugu rubripes rps24 gene
6731	19505	32597	3.83	4.7E-02	W01153.1	EST_HUMAN	yz97W9.r1 Soares melanocyte 2NBHM Homo sapiens cDNA clone IMAGE:281017 5' similar to contains Alu repetitive element
6819	19480	32503	2.02	4.7E-02	M62752.1	NT	Rat statin-related protein (s1) gene, complete CDS
8149	20843	33973	8.24	4.7E-02	X15543.1	NT	B. taurus mRNA for RF-38-DNA-binding protein
8852	21543	34690	0.96	4.7E-02	X89211.1	NT	H. sapiens DNA for endogenous retroviral like element
8875	21566		2.88	4.7E-02	AB028878.1	NT	Gallus gallus Wpica-8 gene, complete cds
9127	21815	34981	6.89	4.7E-02	X15543.1	NT	B. taurus mRNA for RF-38-DNA-binding protein
9547	22200	35382	0.97	4.7E-02	BF305237.1	EST_HUMAN	601882082F1 NIH JM3C_17 Homo sapiens cDNA clone IMAGE:4138414 5'
9635	22287		0.57	4.7E-02	A1873042.1	EST_HUMAN	we79c10.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2347314 3'
10954	23345	36582	1.4	4.7E-02	6754565	NT	Mus musculus ligand of numb-protein X (Lnx), mRNA
11545	24145	37453	1.39	4.7E-02	U73621.1	NT	Bos taurus paired box protein (pax-6) gene, partial cds
11545	24145	37454	1.39	4.7E-02	U73621.1	NT	Bos taurus paired box protein (pax-6) gene, partial cds
264	13072	25712	0.83	4.6E-02	BE163583.1	EST_HUMAN	PMO-HT0339-251199-003-g05 HT0339 Homo sapiens cDNA
722	13496	26149	2.91	4.6E-02	AE000445.1	NT	Escherichia coli K-12 MG1655 section 335 of 400 of the complete genome
1299	14018		0.99	4.6E-02	AJ014255.1	EST_HUMAN	sm50d02.s1 Johnston frontal cortex Homo sapiens cDNA clone IMAGE:1638979 3' similar to TR:P90533
1338	14096	26762	3.47	4.6E-02	AV727059.1	EST_HUMAN	P90533 LIMA ;contains element LTR1 repetitive element ; AV727059 HTC Homo sapiens cDNA clone HTCBWC01 5'

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2492	15209	27951	2.31	4.9E-02	AW236023.1	EST_HUMAN	xn24f03.x1 NCL CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2894653 3' similar to SW:GRF1_HUMAN
2811	13072	28712	1.9	4.9E-02	BE153593.1	EST_HUMAN	Q12849 G-RICH SEQUENCE FACTOR-1;
3325	15774	28423	0.74	4.9E-02	BE153593.1	EST_HUMAN	PMO-HT03339-251199-003-g05 HT03339 Homo sapiens cDNA
3487	15774	28423	0.73	4.9E-02	BE153593.1	EST_HUMAN	PMO-HT03339-251199-003-g05 HT03339 Homo sapiens cDNA
4103	16946		1.35	4.9E-02	AF220395.1	NT	Mus musculus nucleolar RNA helicase II/Gu (dbx21) gene, complete cds
5121	17839	30455	0.99	4.9E-02	AA079157.1	EST_HUMAN	zn92c10.s1 Stratiogene ovarian cancer (#837219) Homo sapiens cDNA clone IMAGE:545394 3' similar to gb:X03212 KERATIN, TYPE II CYTOSKELETAL 7 (HUMAN);
5847	18442	31355	1.57	4.9E-02	AF076902.1	NT	Haplochromis burtoni gonadotropin-releasing hormone and GnRH-associated peptide precursor (Grh2) gene, complete cds
6136	18914	31883	3.51	4.9E-02	X01624.1	NT	G.reinhardtii atp2 (atpB) mRNA
6136	18914	31884	3.51	4.9E-02	X01624.1	NT	G.reinhardtii atp2 (atpB) mRNA
6702	19617	32659	1.47	4.9E-02	AJ149574.1	EST_HUMAN	qc60b06.x1 Soares placenta 86c9weeks_2NbrIP8b9W Homo sapiens cDNA clone IMAGE:1713971 3' similar to contains L1.13 L1 repetitive element;
8554	21246	34386	2.09	4.9E-02	BE154006.1	EST_HUMAN	PMO-HT03339-060400-008-G12 HT03339 Homo sapiens cDNA
11379	23988	37286	4.94	4.9E-02	AA073328.1	EST_HUMAN	cd27h09.s1 Soares_NFL_T_GBC S1 Homo sapiens cDNA clone IMAGE:1524737 3'
12325	24744		1.88	4.9E-02	AV712871.1	EST_HUMAN	AV712871 DCA Homo sapiens cDNA clone DCAAZF07 5'
12705	24985		3.98	4.9E-02	X37808.1	NT	Human germline immunoglobulin lambda light chain gene
434	13220	25868	1.72	4.9E-02	P22448	SWISSPROT	RETINOIC ACID RECEPTOR BETA (RAR-BETA)
1198	13948	26812	1.11	4.9E-02	AF005730.1	NT	Marburg virus strain M/S.Africa/Johannesburg/1975/Ozolin VP35 gene, complete cds
1198	13948	26813	1.11	4.9E-02	AF005730.1	NT	Marburg virus strain M/S.Africa/Johannesburg/1975/Ozolin VP35 gene, complete cds
1797	14537	27247	4.57	4.9E-02	P32182	SWISSPROT	HEPATOCYTE NUCLEAR FACTOR 3-BETA (HNF-3B)
2103	14834	27568	3.76	4.9E-02	AE003984.1	NT	Xylella fastidiosa, section 110 of 229 of the complete genome
3710	18463	28102	3.06	4.9E-02	AL163278.2	NT	Homo sapiens chromosome 21 segment HS21C078
6137	18915	31885	1.61	4.9E-02	AJ400877.1	NT	Homo sapiens ASCL3 gene, CEGP1 gene, C11orf14 gene, C11orf15 gene, C11orf16 gene and C11orf17 gene
6415	19183	32182	0.77	4.9E-02	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
6779	19523	32550	0.61	4.9E-02	L29487.1	NT	Methanosarcina fusa carbon monoxide dehydrogenase large subunit (cdhIA) gene; carbon monoxide dehydrogenase small subunit (cdhIB) gene, complete cds
6779	19523	32551	0.61	4.9E-02	L29487.1	NT	Methanosarcina fusa carbon monoxide dehydrogenase large subunit (cdhIA) gene; carbon monoxide dehydrogenase small subunit (cdhIB) gene, complete cds
8292	20886	34125	1.98	4.9E-02	AF036884.1	NT	Arabidopsis thaliana CCAAT-box binding factor HAP3 homolog gene, complete cds
9849	22498	35699	4.57	4.9E-02	AA325216.1	EST_HUMAN	EST/28167 Cerebellum II Homo sapiens cDNA 5' end similar to neuro-D4 protein
10000	22648	35890	0.48	4.9E-02	X05808.1	NT	A.europaeum mRNA for legumin-like protein

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10116	22764	35976	0.85	4.5E-02	AB000470.1	NT	Gallus gallus mRNA for alpha1 integrin, complete cds
12154	24940	31097	1.94	4.5E-02	11418013	NT	Homo sapiens rat finger protein-like 3 (RFP-L3), mRNA
12537	25290	30733	0.91	4.5E-02	AA191097.1	EST_HUMAN	z4311.1 Stratagene hNT neuron (#937233) Homo sapiens cDNA clone IMAGE:632493 5'
213	13025		5.52	4.4E-02	BE972733.1	EST_HUMAN	601662154F1 NIH_MGC_82 Homo sapiens cDNA clone IMAGE:3935388 5'
2089	14821		5.42	4.4E-02	P31568	SWISSPROT	HYPOTHETICAL PROTEIN (ORF 2280)
2494	15211	27853	2.4	4.4E-02	AW875475.1	EST_HUMAN	QV2-PT0012-010300-070-g02 PT0012 Homo sapiens cDNA
3631	16384	28024	1.95	4.4E-02	AF159100.1	NT	Myxococcus xanthus serine/threonine kinase Pkn1D (pkn1D) gene, complete cds
4584	17319	29945	1.24	4.4E-02	AF109907.1	NT	Homo sapiens S164 gene, partial cds; PS1 and hypothetical protein genes, complete cds; and S171 gene, partial cds
4584	17319	29946	1.24	4.4E-02	AF109907.1	NT	Homo sapiens S164 gene, partial cds; PS1 and hypothetical protein genes, complete cds; and S171 gene, partial cds
4693	17427		2.28	4.4E-02	AJ222889.1	NT	Ovis aries CCAAT-enhancer binding protein epsilon gene
7018	19710	32766	0.84	4.4E-02	AF096824.1	NT	Canis familiaris matrix metalloproteinase 9 (MMP-9) mRNA, partial cds
7018	19710	32767	0.84	4.4E-02	AF096824.1	NT	Canis familiaris matrix metalloproteinase 9 (MMP-9) mRNA, partial cds
8650	21342	34486	2.14	4.4E-02	AA736969.1	EST_HUMAN	hw13h03.s1 NCI_CGAP_SS1 Homo sapiens cDNA clone IMAGE:1236221 3'
11007	23679	36936	2.82	4.4E-02	AF060698.1	NT	Hepatitis E virus strain HEV-US2 polypeptide (ORF1), (ORF3), and capsid protein (ORF2) genes, complete cds
11157	23824	37104	2.78	4.4E-02	AA498739.1	EST_HUMAN	ec33f04.r1 Gessler Wilms tumor Homo sapiens cDNA clone IMAGE:897631 5'
11890	24460		2.57	4.4E-02	AB040926.1	NT	Homo sapiens mRNA for KIAA1483 protein, partial cds
12087	25408		1.87	4.4E-02	BF241245.1	EST_HUMAN	601878746F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:4107418 5'
763	13536	26195	7.07	4.3E-02	AF003249.1	NT	Morone saxatilis myosin heavy chain FM3A (FM3A) mRNA, complete cds
2573	15287	28024	1.23	4.3E-02	AV704878.1	EST_HUMAN	AV704878 ADB Homo sapiens cDNA clone ADBACH08 5'
3423	18180	28830	7.84	4.3E-02	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
3651	18404		1.37	4.3E-02	AF060698.1	NT	Homo sapiens promyelocytic leukemia zinc finger protein (PLZF) gene, complete cds
5152	17869	30482	0.95	4.3E-02	U11788.1	NT	Grapevine fanleaf virus coat protein gene, partial cds
6404	19173	32171	4.3	4.3E-02	P30427	SWISSPROT	PLECTIN
6404	19173	32172	4.3	4.3E-02	P30427	SWISSPROT	PLECTIN
6633	19395	32410	0.73	4.3E-02	AA652268.1	EST_HUMAN	ns60c12.s1 NCI_CGAP_P12 Homo sapiens cDNA clone IMAGE:1188888
8411	21104	34243	0.73	4.3E-02	AF283369.1	NT	Homo sapiens desmocollin 3 (DS3) gene, complete cds, alternatively spliced
8700	21392	34537	1.02	4.3E-02	X55322.1	NT	H. sapiens NCAM mRNA for neural cell adhesion molecule
8700	21392	34538	1.02	4.3E-02	X55322.1	NT	H. sapiens NCAM mRNA for neural cell adhesion molecule
803	13676	26238	2.7	4.2E-02	AU123327.1	EST_HUMAN	AU123327 NT2RM2 Homo sapiens cDNA clone NT2RM2000020 5'
849	13618		2.32	4.2E-02	AU123327.1	EST_HUMAN	AU123327 NT2RM2 Homo sapiens cDNA clone NT2RM2000020 5'

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
876	13945	28315	1.35	4.2E-02	AW003045.1	EST_HUMAN	w34g01.x1 NCI_CGAP_P11 Homo sapiens cDNA clone IMAGE:264584 3' similar to TR-Q63291 Q63291
1714	14457		1.02	4.2E-02	AL445066.1	NT	L1 RETROPOSON, ORF2 MRNA, contains L1.3 L1.1 repetitive element;
1771	14513	27213	1.01	4.2E-02	P23091	SWISSPROT	Thermoplasma acidophilum complete genome; segment 4/5
3655	16408	29047	2.43	4.2E-02	P23091	SWISSPROT	TRANSFORMING PROTEIN MAF
4100	16943	29471	0.7	4.2E-02	BE282605.1	EST_HUMAN	TRANSFORMING PROTEIN MAF
4284	17023	29848	1.83	4.2E-02	U28674.1	NT	601150933F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3603505 5'
4284	17023	29849	1.83	4.2E-02	U28674.1	NT	Saccharomyces cerevisiae general sporulation (SSG1) gene, complete cds
4695	17429	30080	2.32	4.2E-02	BF342995.1	EST_HUMAN	Saccharomyces cerevisiae general sporulation (SSG1) gene, complete cds
							602017105F1 NCI_CGAP_Bm54 Homo sapiens cDNA clone IMAGE:4152872 5'
5530	18328	31231	0.66	4.2E-02	AF280107.1	NT	Homo sapiens cytochrome P450 polypeptide 43 (CYP3A43) gene, partial cds; cytochrome P450 polypeptide 4 (CYP3A4) and cytochrome P450 polypeptide 7 (CYP3A7) genes, complete cds; and cytochrome P450 polypeptide 5 (CYP3A5) gene, partial cds
5530	18328	31232	0.66	4.2E-02	AF280107.1	NT	Homo sapiens cytochrome P450 polypeptide 43 (CYP3A43) gene, partial cds; cytochrome P450 polypeptide 4 (CYP3A4) and cytochrome P450 polypeptide 7 (CYP3A7) genes, complete cds; and cytochrome P450 polypeptide 5 (CYP3A5) gene, partial cds
6886	17962	30517	0.56	4.2E-02	BE286285.1	EST_HUMAN	601124566F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:2869319 5'
7426	20103	33190	4.7	4.2E-02	AF276782.1	NT	Legionella pneumophila catalase-peroxidase (katA) gene, complete cds
8710	21402	34547	3.96	4.2E-02	P05095	SWISSPROT	ALPHA-ACTININ 3, NON MUSCULAR (F-ACTIN CROSS LINKING PROTEIN)
10084	22712	35930	1.22	4.2E-02	Q16650	SWISSPROT	T-BRAIN-1 PROTEIN (T-BOX BRAIN PROTEIN 1) (TBR-1) (TES-56)
10989	23845	36898	2.82	4.2E-02	AA976118.1	EST_HUMAN	on33b11.at NCI_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1558461 3' similar to gb:M65290
11276	23939	37231	2.54	4.2E-02	BE815822.1	EST_HUMAN	INTERLEUKIN-12 BETA CHAIN PRECURSOR (HUMAN);
11278	23939	37232	2.54	4.2E-02	BE815822.1	EST_HUMAN	PM3-BN0174-250500-009-q10 BN0174 Homo sapiens cDNA
11489	24090	37402	1.89	4.2E-02	AF178498.1	NT	PM3-BN0174-250500-009-q10 BN0174 Homo sapiens cDNA
12415	25335		3.43	4.2E-02	AJ983494.1	EST_HUMAN	PRRS isolate PRRSV/98 envelope glycoprotein gene, complete cds
497	13281	25916	1.24	4.1E-02	AF200828.1	NT	w48g10.x1 NCI_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2510850 3'
2683	15392	28131	1.04	4.1E-02	AE002330.2	NT	Homo sapiens HPS1 gene, intron 5
4439	17175		7.82	4.1E-02	AW893484.1	EST_HUMAN	Chlamydia muridarum, section 60 of 85 of the complete genome
5556	18353	31262	0.82	4.1E-02	BE251894.1	EST_HUMAN	QV1-NN0012-180400-184-008 NN0012 Homo sapiens cDNA
5556	18353	31263	0.82	4.1E-02	BE251894.1	EST_HUMAN	601107535F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3343855 5'
6783	19527		0.87	4.1E-02	X75881.1	NT	601107535F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3343855 5'
6989	19891	32742	1.25	4.1E-02	AE002132.1	NT	A.thaliana mRNA for plasma membrane intrinsic protein 1a
7413	20090	33174	2.09	4.1E-02	7662347	NT	Ureaplasma urealyticum section 33 of 59 of the complete genome
							Homo sapiens KIAA0867 protein (KIAA0867), mRNA



Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7502	20173	33285	0.80	4.1E-02	L02110.1	NT	Mus musculus proviral retroviral insertion in the oGMP-phosphodiesterase (rd beta PDE) gene, intron 1, with the proviral insert encompassing the env pseudogene (3' end) and 3' LTR
7695	20329	33438	3.12	4.1E-02	AF028198.1	NT	Fugu rubripes neural cell adhesion molecule L1 homolog (L1-CAM) gene, complete cds; putative protein 1 (PUT1) gene, partial cds; mitose-specific chromosome segregation protein SMC1 homolog (SMC1) gene, complete cds; and calcium channel alpha-1 subunit
8541	21233	34376	0.88	4.1E-02	P34687	SWISSPROT	CUTICLE COLLAGEN 34
9052	21741	34899	0.81	4.1E-02	AA372308.1	EST_HUMAN	EST84291 Colon adenocarcinoma IV Homo sapiens cDNA 5' end
12728	25338	30715	4.07	4.1E-02	AJ271909.1	NT	Braesola napus gin gene for plasmid glutamine synthetase, exons 1-12
3238	18000	28850	3.26	4.0E-02	AB040904.1	NT	Homo sapiens mRNA for KIAA1471 protein, partial cds
3780	16532	29170	1.27	4.0E-02	L11910.1	NT	Human retinoblastoma susceptibility gene exons 1-27, complete cds
5295	18100	30758	5.4	4.0E-02	AF280107.1	NT	Homo sapiens cytochrome P450 polypeptide 43 (CYP3A43) gene, partial cds; cytochrome P450 polypeptide 4 (CYP3A4) and cytochrome P450 polypeptide 7 (CYP3A7) genes, complete cds; and cytochrome P450 polypeptide 5 (CYP3A5) gene, partial cds
6120	18898	31866	0.93	4.0E-02	BF110434.1	EST_HUMAN	7n62h07.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3668380 3' similar to TR:O75268 O75268 R28124.1;
7590	20258	33398	6.57	4.0E-02	L23838.1	NT	Strongylocentrotus purpuratus homolog of human bone morphogenetic protein 1 (submp) mRNA, complete cds
7650	20314		0.86	4.0E-02	AL161535.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 35
7686	20330	33440	0.7	4.0E-02	AB000381.1	NT	Homo sapiens DNA for GPI-anchored molecule-like protein, complete cds
7688	20330	33441	0.7	4.0E-02	AB000381.1	NT	Homo sapiens DNA for GPI-anchored molecule-like protein, complete cds
8617	21309	34451	2.22	4.0E-02	P08840	SWISSPROT	GLUCOAMYLASE S1S2 PRECURSOR (GLUCAN 1,4-ALPHA-GLUCOSIDASE) (1,4-ALPHA-D-GLUCAN GLUCOHYDROLASE)
9544	22197		0.78	4.0E-02	BF979378.1	EST_HUMAN	602153884F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4294724 5'
9567	22220	35408	4.01	4.0E-02	AJ000941.1	NT	Methanobacterium thermoautotrophicum strain Marburg, Thioflavin reductase subunit A
9884	22534		1.21	4.0E-02	D43949.1	NT	Human mRNA for KIAA0082 gene, partial cds
11778	24369		1.64	4.0E-02	AJ001018.1	NT	Kluyveromyces fragilis gene for Car+ ATPase
12053	25168	30808	3.31	4.0E-02	AJ001058.1	NT	Ovis aries mRNA for acetyl-coA carboxylase
1096	19856	26516	2.75	3.9E-02	BF516149.1	EST_HUMAN	U1-H-BW1-amp-h-08-0-UJ.s1 NCL_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3084134 3'
1323	14072	26745	2.45	3.9E-02	P41047	SWISSPROT	FAS ANTIGEN LIGAND
1654	14689	27402	2.4	3.9E-02	AJ403388.1	NT	Musculus DNA for desmin-binding fragment DesD7
2708	16415		1.69	3.9E-02	4506982	NT	Homo sapiens succinate dehydrogenase complex, subunit C, integral membrane protein, 18kD (SDHC) mRNA
4118	16880	29487	0.93	3.9E-02	8924019	NT	Homo sapiens hypothetical protein PRO1163 (PRO1163), mRNA
4118	16880	29488	0.93	3.9E-02	8924019	NT	Homo sapiens hypothetical protein PRO1163 (PRO1163), mRNA

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5408	18207	30913	0.55	3.9E-02	D50608.1	NT	Rat gene for cholecystokinin type-A receptor (CCKAR), complete cds
5408	18207	30914	0.55	3.9E-02	D50608.1	NT	Rat gene for cholecystokinin type-A receptor (CCKAR), complete cds
5644	18439	31353	1.04	3.9E-02	BE068841.1	EST_HUMAN	601649874F1 NIH_MGC_74 Homo sapiens cDNA clone IMAGE:3933842 5'
5766	18557	31484	0.85	3.9E-02	BF076203.1	EST_HUMAN	602138132F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4274910 5'
6957	19439	32454	1.18	3.9E-02	BE271437.1	EST_HUMAN	601140729F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3049830 5'
7739	20435	33557	1.14	3.9E-02	BF236813.1	EST_HUMAN	601908848F1 NIH_MGC_54 Homo sapiens cDNA clone IMAGE:4134779 5'
7959	20654	33778	0.78	3.9E-02	AJ228041.1	NT	Homo sapiens 958 kb contig between AML1 and CBR1 on chromosome 21q22; segment 1/3
7959	20654	33779	0.78	3.9E-02	AJ228041.1	NT	Homo sapiens 958 kb contig between AML1 and CBR1 on chromosome 21q22; segment 1/3
11388	20396	33511	2	3.9E-02	P48778	SWISSPROT	ANTIGEN GOR
11913	25298		15.38	3.9E-02	AB042553.1	NT	Felis catus G-CSF gene for granulocyte colony-stimulating factor, complete cds
12543	24883		1.83	3.9E-02	U60061.1	NT	Human germline T-cell receptor beta chain TCRBV17S1A1T, TCRBV2S1, TCRBV10S1P, TCRBV29S1P, TCRBV16S1P, TCRBV15S1, TCRBV11S1A1T, HVB relic, TCRBV28S1P, TCRBV34S1, TCRBV14S1, TCRBV3S1, TCRBV4S1A1T, TRY4, TRY6, TRY8, TRY7, TRY8, TORBD1, TCRBV1S1, TCRBV1S2,>
12686	25223		5.31	3.9E-02	ALD49806.2	NT	Mus musculus chromosome X contig8; X-linked lymphocyte regulated 5 gene, Zinc finger protein 27/5, Zinc finger protein 92, mmsx28orf
1945	14880	27394	1.16	3.8E-02	BE885137.1	EST_HUMAN	601510891F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3912215 5'
2114	14845		1.77	3.8E-02	AJ251973.1	NT	Homo sapiens partial sterin-1 gene
4876	17603	30228	1.1	3.8E-02	AU124122.1	EST_HUMAN	AU124122 NT2RM2 Homo sapiens cDNA clone NT2RM2001868 5'
5354	18157	30840	1	3.8E-02	MT1228.1	NT	Human protein C gene, complete cds
5908	18777	31739	1.32	3.8E-02	P10284	SWISSPROT	HOMEOBOX PROTEIN HOX-B4 (HOX-2.6)
7218	19903	32976	1.68	3.8E-02	6005700	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 8 (ABCA8), mRNA
8562	21254		1.33	3.8E-02	M60675.1	NT	Human von Willebrand factor gene, exons 23 through 34
10549	23245	36481	2.62	3.8E-02	AF143952.2	NT	Homo sapiens PELOTA (PELOTA) gene, complete cds
971	13736	26401	4.94	3.7E-02	P19137	SWISSPROT	LAMININ ALPHA-1 CHAIN PRECURSOR (LAMININ A CHAIN)
1367	14115	26780	0.91	3.7E-02	L14561.1	NT	Homo sapiens plasma membrane calcium ATPase isoform 1 (ATP2B1) gene, alternative splice products, partial cds
2230	14958	27698	3.84	3.7E-02	AI884908.1	EST_HUMAN	w85608.x1 NCI CGAP_Kd11 Homo sapiens cDNA clone IMAGE:2494502 3'
2582	15298	28034	0.92	3.7E-02	AB016281.1	NT	Homo sapiens mRNA for KIAA0718 protein, partial cds
3045	15811	28457	0.9	3.7E-02	P79944	SWISSPROT	EOMESODDERMIN
3047	15813	28458	2.99	3.7E-02	BF312983.1	EST_HUMAN	601866233F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4125584 5'
3447	16203		1.17	3.7E-02	6680541	NT	Mus musculus potassium large conductance pH-sensitive channel, subfamily M, alpha member 3 (Kcnma3), mRNA
6978	25422		0.83	3.7E-02	AP000063.1	NT	Aeropyrum pernix genomic DNA, section 8/7

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Table 4  
Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7592	20260	33368	0.56	3.7E-02	AE003975.1	NT	Xylella fastidiosa, section 121 of 220 of the complete genome
9914	22563		1	3.7E-02	AA782516.1	EST_HUMAN	af55c08.s1 Soares Parathyroid tumor_NbHPA Homo sapiens cDNA clone 1300812 3'
11954	24506	37811	3.86	3.7E-02	BF124974.1	EST_HUMAN	601762117F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:4024973 5'
12803	25183	30813	1.94	3.7E-02	11418392	NT	Homo sapiens solute carrier family 22 (organic cation transporter), member 1 (SLC22A1), mRNA
3646	16399	29039	1.38	3.6E-02	X73221.1	NT	H. vulgare Ss1 gene for sucrose synthase
3654	16407	29046	0.88	3.6E-02	AL098806.1	NT	Homo sapiens genomic region containing hypervariable minisatellites chromosome 10(10q26.3) of Homo sapiens
5341	18144	30806	0.58	3.6E-02	X59403.1	NT	C. glutamicum gap, pgk and tpi genes for glyceraldehyde-3-phosphate, phosphoglycerate kinase and triosephosphate isomerase
5341	18144	30823	0.58	3.6E-02	X59403.1	NT	C. glutamicum gap, pgk and tpi genes for glyceraldehyde-3-phosphate, phosphoglycerate kinase and triosephosphate isomerase
5413	18212	30921	0.64	3.6E-02	AF181722.1	NT	Homo sapiens RUZAS (RU2) mRNA, complete cds
6607	19370	32382	5.47	3.6E-02	AW945516.1	EST_HUMAN	CM2-EN0013-110500-192-b10 EN0013 Homo sapiens cDNA
6607	19370	32383	5.47	3.6E-02	AW945516.1	EST_HUMAN	CM2-EN0013-110500-192-b10 EN0013 Homo sapiens cDNA
6986	19678	32725	2.5	3.6E-02	AF025952.1	NT	Chromatium vinosum sulfur globule protein Cyt2 precursor (sep2) gene, complete cds
7206	19891	32967	2.78	3.6E-02	AA714521.1	EST_HUMAN	rw20a05.s1 NC1_CGAP_GCB0 Homo sapiens cDNA clone IMAGE:1241024 3' similar to gb:U00314_mae2
7533	20203	33298	1.03	3.6E-02	BE143078.1	EST_HUMAN	TUBULIN BETA-1 CHAIN (HUMAN);
8281	21856	35130	1.72	3.6E-02	U20608.1	NT	MR0-HT0158-030200-003-b08 HT0158 Homo sapiens cDNA
9291	21958	35131	1.72	3.6E-02	U20608.1	NT	Dictyostelium discoideum unknown spore germination-specific protein-like protein, orf1, orf2 and orf3 genes, complete cds
9512	22185	35347	0.83	3.6E-02	BF347586.1	EST_HUMAN	602020463F1 NC1_CGAP_Brm67 Homo sapiens cDNA clone IMAGE:4166118 5'
11135	23803	37080	1.4	3.6E-02	BF131609.1	EST_HUMAN	601820416F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:4052570 5'
11135	23803	37081	1.4	3.6E-02	BF131609.1	EST_HUMAN	601820416F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:4052570 5'
11952	24436		1.46	3.6E-02	AL280986.1	EST_HUMAN	qlk48b09.x1 NC1_CGAP_Co8 Homo sapiens cDNA clone IMAGE:1872185 3'
875	13644	26314	1.08	3.5E-02	U09506.1	NT	Drosophila melanogaster tlggrin mRNA, complete cds
988	13751	26413	1.39	3.5E-02	AF253417.1	NT	Homo sapiens microtubule epoxide hydrolase (EPHX1) gene, complete cds
1556	14303	26901	1.55	3.5E-02	BF578085.1	EST_HUMAN	602085136F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4249377 5'
1556	14303	26962	1.55	3.5E-02	BF578085.1	EST_HUMAN	602085136F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4249377 5'
4188	16928	29559	1.83	3.5E-02	AE001773.1	NT	Thermoboga maritima section 85 of 136 of the complete genome
4281	17020	29647	1.27	3.5E-02	P53780	SWISSPROT	CYSTATHIONINE BETA-LYASE PRECURSOR (CBL) (BETA-CYSTATHIONASE) (CYSTEINE LYASE)
6127	18905	31873	1.77	3.5E-02	J01238.1	NT	Maize actin 1 gene (MACT1), complete cds

Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7877	20572		0.78	3.5E-02	H20951.1	EST_HUMAN	yp44e05.r1 Scores retina N2b5HR Homo sapiens cDNA clone IMAGE:190256 5' similar to contains Alu repetitive element
8521	21213	34357	2.7	3.5E-02	BE958970.1	EST_HUMAN	601844701R2 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:3928737 3'
9817	22566	35782	1.45	3.5E-02	X76842.1	NT	L.lactis MG1363 grfE and dnaK genes
9965	22613	35817	0.5	3.5E-02	BE951042.1	EST_HUMAN	601344861F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3677654 5'
11477	24078	37388	1.82	3.5E-02	AW861841.1	EST_HUMAN	PM1-CT0328-291299-002-H03 CT0328 Homo sapiens cDNA
11477	24078	37389	1.82	3.5E-02	AW861841.1	EST_HUMAN	PM1-CT0328-291299-002-H03 CT0328 Homo sapiens cDNA
12598	25234		5.99	3.5E-02	BE270948.1	EST_HUMAN	601178785F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3543833 5'
564	13346	25973	1.14	3.4E-02	AK024424.1	NT	Homo sapiens mRNA for FLJ00013 protein, partial cds
564	13346	25974	1.14	3.4E-02	AK024424.1	NT	Homo sapiens mRNA for FLJ00013 protein, partial cds
565	13346	25973	6.47	3.4E-02	AK024424.1	NT	Homo sapiens mRNA for FLJ00013 protein, partial cds
565	13346	25974	6.47	3.4E-02	AK024424.1	NT	Homo sapiens mRNA for FLJ00013 protein, partial cds
1029	13789	26448	2.92	3.4E-02	AW274020.1	EST_HUMAN	SW:C211_HUMAN_P53801 PUTATIVE SURFACE GLYCOPROTEIN C21ORF1 PRECURSOR ;
1184	13836		7.14	3.4E-02	11345459	NT	Homo sapiens hypothetical protein FLJ13220 (FLJ13220), mRNA
2361	15112	27849	2.06	3.4E-02	T57160.1	EST_HUMAN	yc20e08.r1 Stratagene lung (#837210) Homo sapiens cDNA clone IMAGE:81250 5' similar to contains MER29 repetitive element
3424	16181	28831	1.4	3.4E-02	AL163208.2	NT	Homo sapiens chromosome 21 segment HS21C008
3757	16509	26145	0.7	3.4E-02	BE839514.1	EST_HUMAN	RC3-FN0155-060700-011-d10 FN0155 Homo sapiens cDNA
3900	16850	29291	3.19	3.4E-02	AW794952.1	EST_HUMAN	RC8-UM0016-210200-021-A10 UM0016 Homo sapiens cDNA
4559	17294	28922	2.41	3.4E-02	X59796.1	NT	M.musculus S-antigen gene promoter region
5000	17723		3.59	3.4E-02	Q28457	SWISSPROT	LA PROTEIN HOMOLOG (LA RIBONUCLEOPROTEIN) (LA AUTOANTIGEN HOMOLOG)
5019	17740	30349	1.2	3.4E-02	AJ012469.1	NT	Caenorhabditis elegans mRNA for DYS-1 protein, partial
6764	17823	30558	4.73	3.4E-02	U24393.1	NT	Human lysyl oxidase-like protein gene, exon 3
8159	20853		3.25	3.4E-02	A080629.1	EST_HUMAN	wf89d04.x1 NCL_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2433031 3'
8846	21338	34482	1.36	3.4E-02	AA084896.1	EST_HUMAN	nu70f08.s1 NCL_CGAP_Ab1 Homo sapiens cDNA clone IMAGE:1216071 similar to contains Alu repetitive element; contains element MER25 MER25 repetitive element ;
							zq04f11.s1 Stratagene muscle 637200 Homo sapiens cDNA clone IMAGE:628749 3' similar to TR:G1017425 G1017425
8814	21506		5.97	3.4E-02	AA194306.1	EST_HUMAN	IPISGKPLPKVTLSDRGVPLKATMRFNTEITAENLTLNKESVTADAGRYEITAANSSGTTKAFINIVLDRPG
9678	22330		0.83	3.4E-02	AA02719.1	EST_HUMAN	PPT GPVVISDITEESVTLKWEPPKDYGSQVNTYLLKRETSTAVWTEVSATVARTMMKVMKL ... ;
363	13161		8.61	3.3E-02	AA398735.1	EST_HUMAN	cd89h08.x1 Scores parathyroid tumor_NbHPA Homo sapiens cDNA clone IMAGE:1883519 3'
1143	13898	26559	17.86	3.3E-02	AB035867.1	NT	z175e06.s1 Scores testis_NHT Homo sapiens cDNA clone IMAGE:728198 3'
							Orfokulus griseus CYP2A17 mRNA for cytochrome P450 2A17, complete cds

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1489	14298	26923	1.16	3.3E-02	L16870.1	NT	Homo sapiens cytochrome P4502C18 (CYP2C18) gene, exons 2 and 3
1635	14381	27068	1.47	3.3E-02	AF110763.1	NT	Homo sapiens skeletal muscle LIM-protein 1 (FHL1) gene, complete cds
1732	14474		1.29	3.3E-02	AE000700.1	NT	Aquifex aeolicus section 32 of 109 of the complete genome
2077	14809		2.48	3.3E-02	R09112.1	EST_HUMAN	Y25509.1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:127888 5'
2453	15171	27910	1.31	3.3E-02	6755862	NT	Mus musculus tumor rejection antigen gp96 (Ttr1), mRNA
4156	14381	27068	2.44	3.3E-02	AF110763.1	NT	Homo sapiens skeletal muscle LIM-protein 1 (FHL1) gene, complete cds
4435	17171	26800	1.78	3.3E-02	6755862	NT	Mus musculus tumor rejection antigen gp96 (Ttr1), mRNA
6336	19108	32095	27.36	3.3E-02	BF245995.1	EST_HUMAN	601853910F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4073787 5'
6336	19108	32096	27.36	3.3E-02	BF245995.1	EST_HUMAN	601853910F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4073787 5'
7408	20085	33169	0.63	3.3E-02	AF124162.1	NT	Nicotiana plumbaginifolia methylglutathione synthase sulphurylase (mtx5) gene, partial cds
9222	21901	35071	0.74	3.3E-02	BF115621.1	EST_HUMAN	7m82804.x1 NCI CGAP_Bm23 Homo sapiens cDNA clone IMAGE:3562423 3'
9222	21901	35072	0.74	3.3E-02	BF115621.1	EST_HUMAN	7m82804.x1 NCI CGAP_Bm23 Homo sapiens cDNA clone IMAGE:3562423 3'
9324	21991	35162	0.66	3.3E-02	AA488202.1	EST_HUMAN	ad0809.s1 Soares_NHFB Homo sapiens cDNA clone IMAGE:877673 3' similar to gb:X70944_cds1
9324	21991	35163	0.66	3.3E-02	AA488202.1	EST_HUMAN	ad0809.s1 Soares_NHFB Homo sapiens cDNA clone IMAGE:877673 3' similar to gb:X70944_cds1
11065	23735	37008	3.63	3.3E-02	BF091107.1	EST_HUMAN	MYOBLAST CELL SURFACE ANTIGEN 24.1D5 (HUMAN);
12142	24630		3.24	3.3E-02	T06545.1	EST_HUMAN	602247171F1 NIH_MGC_82 Homo sapiens cDNA clone IMAGE:4332497 5'
12259	24704		1.52	3.3E-02	AF289665.1	NT	ye49f11.1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:121101 5'
12288	24718		2.92	3.3E-02	M81890.1	NT	Mus musculus EIF4H gene, partial cds; LIMK1 gene, complete cds; and ELN gene, partial cds
129	12944	25568	0.74	3.2E-02	AJ02005.1	NT	Human Interleukin 11 (IL11) gene, complete mRNA
1104	13861	26620	7.01	3.2E-02	AF096275.1	NT	Oryctolagus cuniculus gene encoding ileal sodium-dependent bile acid transporter
1104	13861	26621	7.01	3.2E-02	AF096275.1	NT	Drosophila melanogaster heat shock protein 89 (hsp89) gene, hsp89d allele, complete cds
2112	14843		3.01	3.2E-02	P28965	SWISSPROT	Drosophila melanogaster heat shock protein 88 (hsp88) gene, hsp88d allele, complete cds
3131	15898	26540	10.08	3.2E-02	BE667353.1	EST_HUMAN	LARGE TEGUMENT PROTEIN
3701	16454	26094	0.92	3.2E-02	AL163203.2	NT	601442431F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3846727 5'
3942	16692	26330	1.64	3.2E-02	Z74103.1	NT	Homo sapiens chromosome 21 segment HS21C003
3942	16692	26331	1.64	3.2E-02	Z74103.1	NT	S.cerevisiae chromosome IV reading frame ORF YDL055c
4163	16934		14.21	3.2E-02	X94768.1	NT	S.cerevisiae chromosome IV reading frame ORF YDL055c
4716	17448	30081	3.42	3.2E-02	AF114182.1	NT	H. sapiens RP3 gene (XLRP gene 3)
4894	17921		1.09	3.2E-02	AF109906.1	NT	Sedfraga nidifica maturase (matf) gene, chloroplast gene encoding chloroplast protein, partial cds
5448	18247	31135	1.83	3.2E-02	X06709.1	NT	Mus musculus MHC class III region RD gene, partial cds; Bf, C2, G9A, NG22, G9, HSP70, HSP70, HSC70, and smRNP genes, complete cds; G7A gene, partial cds; and unknown genes
						NT	S. griseocarinum whiG-Stv gene

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5448	18247	31138	1.83	3.2E-02	X68709.1	NT	S.griseocarnum whiG-Stv gene
6431	19169	32198	3.13	3.2E-02	M32437.1	NT	Ratipolyomavirus left junction in cell line W86.14
6432	19200		33.46	3.2E-02	T89367.1	EST_HUMAN	y33h12.s1 Soares fetal liver spleen 1NLS Homo sapiens cDNA clone IMAGE:110087 3' similar to contains Alu repetitive element; contains LTR1 repetitive element;
6513	19278	32279	4.14	3.2E-02	AF173845.1	NT	Segalinius oedipus tissue kallikrein gene, complete cds
7682	20328	33436	0.84	3.2E-02	11424049	NT	Homo sapiens cytochrome P450, subfamily 11B (phenobarbital-inducible) (CYP2B), mRNA
8169	20893	34030	4.84	3.2E-02	6880566	NT	Mus musculus kinesin family member 3c (Kif3c), mRNA
8839	21531		0.73	3.2E-02	AF109718.1	NT	Homo sapiens chromosome 3 subtelomeric region
9125	21813	34978	1.21	3.2E-02	AI278871.1	EST_HUMAN	qm17b04.x1 NCI_CGAP Lu5 Homo sapiens cDNA clone IMAGE:1882063 3'
9125	21813	34979	1.21	3.2E-02	AI278871.1	EST_HUMAN	qm17b04.x1 NCI_CGAP Lu5 Homo sapiens cDNA clone IMAGE:1882063 3'
9857	22605		4.07	3.2E-02	AA719795.1	EST_HUMAN	z54b12.s1 Soares pineal gland N3HPG Homo sapiens cDNA clone IMAGE:397151 3' similar to gb1L08441 CYTOCHROME C OXIDASE POLYPEPTIDE III (HUMAN);
10266	22804	36114	0.96	3.2E-02	U98762.1	NT	Macaca mulatta chemokine receptor GCR5 mRNA, complete cds
1237	13986		2.14	3.1E-02	4503416	NT	Homo sapiens dual specificity phosphatase 4 (DUSP4) mRNA
1282	14032	26702	1.72	3.1E-02	P18845	SWISSPROT	NEURONAL ACETYLCHOLINE RECEPTOR PROTEIN, ALPHA-3 CHAIN PRECURSOR (GF-ALPHA-3)
1885	14622	27332	1.09	3.1E-02	6871584	NT	Mus musculus adaptor-related protein complex AP-3, delta subunit (Ap3d), mRNA
1887	14703		1.34	3.1E-02	Z50097.1	NT	Drosophila melanogaster mRNA for headcase protein
5182	17690	30506	1.13	3.1E-02	U78104.1	NT	Human leukemia inhibitory factor receptor (LIFR) gene, promoter and partial exon 1
5276	18081		2.12	3.1E-02	AA278478.1	EST_HUMAN	zs81a08.f1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:703858 5'
5561	18358	31288	0.74	3.1E-02	BF887742.1	EST_HUMAN	602066783F1 NIH_MGC 57 Homo sapiens cDNA clone IMAGE:4066789 5'
5628	25072	31338	0.59	3.1E-02	AJ391284.1	NT	Neisseria meningitidis DNA for region 2 (flaB- and flaeC-homologs, unknown genes) and flanking genes, strain FAM18
8840	21532	34577	0.46	3.1E-02	BE965092.2	EST_HUMAN	601658878R1 NIH_MGC 69 Homo sapiens cDNA clone IMAGE:3886291 3'
9831	22579	35778	2.93	3.1E-02	AF034779.1	NT	Enterococcus faecalis surface protein precursor, gene, complete cds
11765	24356	37699	1.78	3.1E-02	6754241	NT	Mus musculus histidine rich calcium binding protein (Hrc), mRNA
1619	14366		1.98	3.0E-02	AF167125.1	NT	Phytoleaves minutus cytochrome oxidase I gene, partial cds; mitochondrial gene for mitochondrial product
2590	15304	28040	0.97	3.0E-02	AA402242.1	EST_HUMAN	z55h03.f1 Soares testis NHT Homo sapiens cDNA clone IMAGE:727253 5'
3846	16398	29038	2.78	3.0E-02	AF247644.1	NT	Pseudomonas fluorescens family II aminotransferase gene, complete cds
3728	16480		0.74	3.0E-02	AW820223.1	EST_HUMAN	QV2-S10286-150200-040-e09 ST0286 Homo sapiens cDNA
3628	16679		1.42	3.0E-02	AA364003.1	EST_HUMAN	EST174530 Pineal gland II Homo sapiens cDNA 5' end
4991	17714	30318	5.83	3.0E-02	AF281074.1	NT	Homo sapiens neuropilin 2 (NRP2) gene, complete cds, alternatively spliced
4991	17714	30319	5.83	3.0E-02	AF281074.1	NT	Homo sapiens neuropilin 2 (NRP2) gene, complete cds, alternatively spliced
5307	18112		3.43	3.0E-02	AB046783.1	NT	Homo sapiens mRNA for KIAA1573 protein, partial cds

Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6160	18837	31905	1.4	3.0E-02	N98615.1	EST_HUMAN	z339a10.t1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:284908 5' similar to contains element TAR1 repetitive element;
6160	18837	31906	1.4	3.0E-02	N98615.1	EST_HUMAN	z339a10.t1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:284908 5' similar to contains element TAR1 repetitive element;
6662	19609	32648	3.32	3.0E-02	AJ242803.1	NT	Cyrtinus carpio mRNA for inducible nitric oxide synthase (NOS gene)
6808	19467	32488	2.84	3.0E-02	BE889948.1	EST_HUMAN	601512208F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3913848 5'
6806	19467	32489	2.84	3.0E-02	BE889948.1	EST_HUMAN	601512208F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3913848 5'
6871	19463	32472	2.15	3.0E-02	AF213884.1	NT	Homo sapiens nuclear factor of kappa light polypeptide gene enhancer in B-cells 1 (NFKB1) gene, complete cds
6871	19463	32473	2.15	3.0E-02	AF213884.1	NT	Homo sapiens nuclear factor of kappa light polypeptide gene enhancer in B-cells 1 (NFKB1) gene, complete cds
7132	19819	32885	1.4	3.0E-02	MB8524.1	NT	Human dystrophin gene
7483	20155		0.59	3.0E-02	BF248361.1	EST_HUMAN	601854981F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4074548 5'
8025	20720		0.48	3.0E-02	BF879706.1	EST_HUMAN	602154384F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4285554 5'
8639	21231	34373	0.68	3.0E-02	BF353888.1	EST_HUMAN	IL5-HT0704-290600-108-c04 HT0704 Homo sapiens cDNA
8692	21384		1.8	3.0E-02	AF275854.1	NT	Ornithomycinus anialinus coagulation factor X mRNA, complete cds
10357	23004	36221	1.48	3.0E-02	AE001797.1	NT	Thermoboga maritima section 109 of 138 of the complete genome
10446	23062	36322	0.49	3.0E-02	Z21211.1	EST_HUMAN	HSAAADTHS TEST1, Human adult Testis tissue Homo sapiens cDNA clone cam test244 (b)
11197	23862	37148	2.73	3.0E-02	MB1357.1	NT	Human coagulation factor VII (F7) gene exon 1 and factor X(F10) gene, exon 1
11690	24285	37607	7.75	3.0E-02	AA483216.1	EST_HUMAN	ne87704.s1 NCI CGAP_Kd1 Homo sapiens cDNA clone IMAGE:911263
12243	25399	30618	2	3.0E-02	R32019.1	EST_HUMAN	y833404.s1 Soares placenta Nb24P Homo sapiens cDNA clone IMAGE:134407 3'
12587	24909		2.48	3.0E-02	AW895565.1	EST_HUMAN	QV4-NIN0038-270400-187-405 NN0038 Homo sapiens cDNA
12829	25383		2.06	3.0E-02	AF048887.1	NT	Rattus norvegicus UDP-Gal:glucosylceramide beta-1,4-galactosyltransferase mRNA, complete cds
2436	16594	27891	1.27	2.9E-02	AF228703.1	NT	Homo sapiens mitochondrial glutathione reductase and cytosolic glutathione reductase (GRD1) gene, complete cds, alternatively spliced
2890	15758	28402	1.04	2.9E-02	BE565844.1	EST_HUMAN	601338428F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3680695 5'
2990	15756	28403	1.04	2.9E-02	BE565844.1	EST_HUMAN	601338428F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3680695 5'
3908	16658	28209	0.89	2.9E-02	H72805.1	EST_HUMAN	y07010.t1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:233130 5'
5972	18754	31715	0.97	2.9E-02	AF080221.1	NT	Sus scrofa deoxyribonuclease II mRNA, complete cds
6169	18675	31863	7.39	2.9E-02	BF032233.1	EST_HUMAN	601452061F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3856588 5'
6855	19555	32585	0.56	2.9E-02	AJ391284.1	NT	Neisseria meningitidis DNA for region 2 (flaB- and flaC-homologs, unknown genes) and flanking genes, strain FAM18
7148	18835	32904	12.03	2.9E-02	BE271437.1	EST_HUMAN	601140728F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3049830 5'

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7987	20592	33723	0.87	2.9E-02	AF129279.1	NT	Buchnera aphidicola natural-host Schlectendallia chinensis gluconate-6-phosphate dehydrogenase (gnd) gene, partial cds
7987	20592	33724	0.87	2.9E-02	AF129279.1	NT	Buchnera aphidicola natural-host Schlectendallia chinensis gluconate-6-phosphate dehydrogenase (gnd) gene, partial cds
9558	22211	35398	2.49	2.9E-02	AW875978.1	EST_HUMAN	GN3-PT0014-071299-051-c04 PT0014 Homo sapiens cDNA
9558	22211	35397	2.49	2.9E-02	AW875979.1	EST_HUMAN	GN3-PT0014-071299-051-c04 PT0014 Homo sapiens cDNA
9774	22425		0.75	2.9E-02	AW876587.1	EST_HUMAN	EST388708 MAGE resequences, MAGN Homo sapiens cDNA
10243	22891	36103	1.25	2.9E-02	AP000064.1	NT	Aeropyrum pernix genomic DNA, section 7/7
10977	17902	30590	1.91	2.9E-02	X55294.1	NT	Sheep gene for ultra high-sulphur keratin protein
552	13336		0.96	2.8E-02	AW970163.1	EST_HUMAN	EST382234 MAGE resequences, MAGK Homo sapiens cDNA
3360	16119	28775	1.3	2.8E-02	AF068063.1	NT	Homo sapiens retinal fascic (FSCN2) gene, exon 2
3360	16119	28776	1.3	2.8E-02	AF068063.1	NT	Homo sapiens retinal fascic (FSCN2) gene, exon 2
5400	18200	30805	11.62	2.8E-02	BE741083.1	EST_HUMAN	601594078F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3948067 5'
6711	19826	32670	1.15	2.8E-02	T78990.1	EST_HUMAN	yd21b08.t1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:108855 5'
8226	20920	34068	1.61	2.8E-02	AJ005820.1	NT	Craterostigma plantaginum mRNA for homeodomain leucine zipper protein (hb-1)
8815	21608	34749	0.85	2.8E-02	AA280782.1	EST_HUMAN	zs88c08.t1 NCI CGAP_GCB1 Homo sapiens cDNA clone IMAGE:711466 5'
9108	21798	34980	1	2.8E-02	AF187872.1	NT	Carda porcellus inwardly-rectifying potassium channel Kir2.1 (KCNJ2) gene, complete cds
9212	21891	35058	0.69	2.8E-02	AE001092.1	NT	Archaeoglobus fulgidus section 15 of 172 of the complete genome
12528	25229		1.5	2.8E-02	R06986.1	EST_HUMAN	Y12h02.t1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:128675 5'
12530	24878		1.48	2.8E-02	X08322.1	NT	Yeast CN31C chromosome III RAHS DNA (right arm transcription hot-spot)
							Human germline T-cell receptor beta chain Dopamine-beta-hydroxylase-like, TRY1, TRY2, TRY3, TCRBV27S1P, TCRBV22S1A2N1T, TCRBV9S1A1T, TCRBV7S1A1N2T, TCRBV6S1A1T, TCRBV13S3, TCRBV6S7P, TCRBV7S9A2T, TCRBV13S2A1T, TCRBV6S2A2PT, TCRBV7S2A1N4T, TCRBV13S9/13S>
1472	14219	28805	1.23	2.7E-02	U68059.1	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 6
3425	16182	28832	1.74	2.7E-02	AL161494.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 6
4178	16918	29545	1.92	2.7E-02	N47268.1	EST_HUMAN	Y68h12.t1 Soares_multiple_sclerosis_2NHFMSIP Homo sapiens cDNA clone IMAGE:280487 5'
4178	16918	29546	1.92	2.7E-02	N47268.1	EST_HUMAN	Y68h12.t1 Soares_multiple_sclerosis_2NHFMSIP Homo sapiens cDNA clone IMAGE:280487 5'
5355	18158	30841	1.2	2.7E-02	R12245.1	EST_HUMAN	Y33009.t1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:128657 5' similar to SP-JC2264 JC2264 TISSUE FACTOR PATHWAY INHIBITOR - RHESUS ;
5912	18601	31529	0.86	2.7E-02	X61870.1	NT	T.aestivum pTTH20 mRNA for wheat type V thionin
5985	18671	31612	0.84	2.7E-02	AB004799.1	NT	Oryza sativa mRNA for ascorbate oxidase, partial cds
6505	19270		0.93	2.7E-02	X97580.1	NT	A.blaeporus pgkA gene
6967	19449	32467	2.29	2.7E-02	AA983571.1	EST_HUMAN	cd98f03.at Soares_total_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:1824681 3'



Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8252	20946		1.08	2.7E-02	AI377036.1	EST_HUMAN	1c28g08.x1 Soares_tot_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:2065982 3' similar to contains Alu repetitive element
8514	21206	34349	0.49	2.7E-02	SA3442.1	NT	transmembrane secretory component [human, leukocytes, Genomic, 657 nt, segment 4 of 11]
558	13340	25688	1.12	2.6E-02	AL163282.2	NT	Homo sapiens chromosome 21 segment HS21C082
2366	15068	27825	3.29	2.6E-02	AA490021.1	EST_HUMAN	ab02b02.s1 Stratiogene fetal retina 637202 Homo sapiens cDNA clone IMAGE:839585 3'
2368	15090	27827	4.49	2.6E-02	6754241	NT	Mus musculus histidine rich calcium binding protein (Hirc), mRNA
2368	15090	27828	4.49	2.6E-02	6754241	NT	Mus musculus histidine rich calcium binding protein (Hirc), mRNA
2916	15882		1.86	2.6E-02	AF109906.1	NT	Mus musculus MHC class III region RD gene, partial cds; Bf, C2, G9A, NG22, G9, HSP70, HSP70, HSC70, and smRNP genes, complete cds; G7A gene, partial cds; and unknown genes
4847	17577	30200	2.25	2.6E-02	L12032.1	NT	Chicken dorsalin-1 mRNA, complete cds
5005	17728	30332	1.56	2.6E-02	AE002014.1	NT	Deinococcus radiodurans R1 section 161 of 229 of the complete chromosome 1
5032	17752	30384	2.35	2.6E-02	AW241154.1	EST_HUMAN	hs52b04.x1 NCL CGAP_Sar4 Homo sapiens cDNA clone IMAGE:2570383 3' similar to SW:Y069_HUMAN Q15041 HYPOTHETICAL PROTEIN KIAA00069
5764	18546		0.7	2.6E-02	AL161563.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 63
5800	18590		0.59	2.6E-02	AL161563.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 63
6125	18903		7.34	2.6E-02	AI206030.1	EST_HUMAN	gg27f11.x1 NCL CGAP_Kd3 Homo sapiens cDNA clone IMAGE:1762317 3'
6331	19101	32089	1.9	2.6E-02	BE621748.1	EST_HUMAN	601493473T1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3895578 3'
6728	19562	32593	0.9	2.6E-02	Z99064.1	NT	Vaccinia virus ORF1L, strain Wyeth
6728	19562	32594	0.9	2.6E-02	Z99064.1	NT	Vaccinia virus ORF1L, strain Wyeth
6810	19471	32404	7.11	2.6E-02	6881271	NT	Rattus norvegicus Nerve growth factor receptor, test (Ngfr), mRNA
8403	21086	34232	0.71	2.6E-02	AA860946.1	EST_HUMAN	sk22f04.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1406719 3'
9280	22014	35182	1.15	2.6E-02	11432020	NT	Homo sapiens KIAA1070 protein (KIAA1070), mRNA
9614	22287	35453	0.75	2.6E-02	AF114952.1	NT	Saccharomyces cerevisiae NRRL Y-12639(T) ATP synthase subunit 9 (ATP9) gene, mitochondrial gene encoding mitochondrial protein, complete cds
9614	22287	35454	0.75	2.6E-02	AF114952.1	NT	Saccharomyces cerevisiae NRRL Y-12639(T) ATP synthase subunit 9 (ATP9) gene, mitochondrial gene encoding mitochondrial protein, complete cds
10303	22950	36185	4.39	2.6E-02	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
11191	23898		1.07	2.6E-02	4509468	NT	Homo sapiens radixin (RDX) mRNA
11361	24046		2.33	2.6E-02	AA276351.1	EST_HUMAN	zs84c02.r1 NCL CGAP_G081 Homo sapiens cDNA clone IMAGE:704162 5'
11553	24152	37466	2.2	2.6E-02	AW500547.1	EST_HUMAN	U1HF-BN0-ek-e-10-0-U1.r1 NIH_MGC_60 Homo sapiens cDNA clone IMAGE:3077466 5'
12170	26373	30615	2.09	2.6E-02	BF343827.1	EST_HUMAN	602015501F1 NCL CGAP_Bm64 Homo sapiens cDNA clone IMAGE:4150944 5'
519	13303	25935	1.75	2.5E-02	AI703130.1	EST_HUMAN	on26f08.y5 NCL CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1557827 5'
519	13303	25936	1.75	2.5E-02	AI703130.1	EST_HUMAN	on26f08.y5 NCL CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1557827 5'
791	13563	26224	15.9	2.5E-02	BE974314.1	EST_HUMAN	601080305R2 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:3950965 3'

Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
849	13619	26289	7.2	2.5E-02	BE974314.1	EST_HUMAN	601680305F2 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:3950685 3'
2768	15471		2.24	2.5E-02	U12571.1	NT	Rattus norvegicus rephosphatase 3A mRNA, complete cds
2958	15722	28371	4.35	2.5E-02	X99897.1	NT	H. carterae mRNA for fucosyltransferase 1, Fcp1
2958	15722	28372	4.35	2.5E-02	X99897.1	NT	H. carterae mRNA for fucosyltransferase 1, Fcp1
4023	17879	28389	1	2.5E-02	BE701165.1	EST_HUMAN	PM2-NN0128-080700-001-012 NN0128 Homo sapiens cDNA
4023	17879	29400	1	2.5E-02	BE701165.1	EST_HUMAN	PM2-NN0128-080700-001-012 NN0128 Homo sapiens cDNA
4182	16922	28660	4.23	2.5E-02	AW622114.1	EST_HUMAN	H36h08.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2834015 3'
5625	18422	31335	0.61	2.5E-02	AI732776.1	EST_HUMAN	z683c10.x6 Soares ovary tumor N6-KOT Homo sapiens cDNA clone IMAGE:810354 3'
6100	18878		5.01	2.5E-02	BE670128.1	EST_HUMAN	7e30e08.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3284008 3' similar to contains L1.11 L1
6115	18893		4.1	2.5E-02	BE748888.1	EST_HUMAN	601679393F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3928054 5'
6244	19018	31982	1.04	2.5E-02	L20028.1	NT	Chlamydomonas reinhardtii VSP-3 mRNA, complete cds
7563	20233	33336	1.7	2.5E-02	BF526722.1	EST_HUMAN	602070582F1 NCI_CGAP_Bm84 Homo sapiens cDNA clone IMAGE:4213408 5'
7563	20233	33337	1.7	2.5E-02	BF526722.1	EST_HUMAN	602070582F1 NCI_CGAP_Bm84 Homo sapiens cDNA clone IMAGE:4213408 5'
8724	21416	34580	0.81	2.5E-02	Q91713	SWISSPROT	CHORDIN PRECURSOR (ORGANIZER-SPECIFIC SECRETED DORSALIZING FACTOR)
8863	21554	34609	0.47	2.5E-02	AW025821.1	EST_HUMAN	wu08c10.x1 NCI_CGAP_GC8 Homo sapiens cDNA clone IMAGE:2516370 3'
9966	22814		0.55	2.5E-02	X71303.1	NT	D. radiatum 28S ribosomal RNA, D2 domain
10482	23128	36356	0.65	2.5E-02	AI147815.1	EST_HUMAN	qb22a08.x1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:1686982 3'
10712	23401	36840	2.01	2.5E-02	Q10335	SWISSPROT	HYPOTHETICAL 46.7 KD PROTEIN C19G10.05 IN CHROMOSOME 1
10712	23401	36841	2.01	2.5E-02	Q10335	SWISSPROT	HYPOTHETICAL 46.7 KD PROTEIN C19G10.05 IN CHROMOSOME 1
10773	23456	36700	2.32	2.5E-02	AJ237836.1	NT	Bos taurus perlestatin gene, exons 17-19
10795	23478		3.46	2.5E-02	AF060157.1	NT	Mus musculus major histocompatibility locus class II region: major histocompatibility protein class II alpha chain (IAalpha) and major histocompatibility protein class II beta chain (IEbeta) genes, complete cds; butyrophilin-like (N39), butyrophilin-1p
11770	24361		2.55	2.5E-02	AB007548.1	NT	Homo sapiens gene for LECT2, complete cds
12134	25311		2.89	2.5E-02	11420078	NT	Homo sapiens similar to ALEX3 protein (H. sapiens) (LOC63634), mRNA
12311	25182		1.76	2.5E-02	11439220	NT	Homo sapiens mitogen-activated protein kinase kinase 13 (MAP3K13), mRNA
12432	24804	31043	1.94	2.5E-02	BE973327.1	EST_HUMAN	601652305F2 NIH_MGC_82 Homo sapiens cDNA clone IMAGE:3935513 3'
1593	14339	27028	1.7	2.4E-02	H65884.1	EST_HUMAN	y75f11.1 Soares fetal liver spleen INFLS Homo sapiens cDNA clone IMAGE:211149 5'
2037	15584	27501	1.92	2.4E-02	P01901	SWISSPROT	H-2 CLASS I HISTOCOMPATIBILITY ANTIGEN, K-B ALPHA CHAIN PRECURSOR (H-2K(B))
2037	15584	27502	1.92	2.4E-02	P01901	SWISSPROT	H-2 CLASS I HISTOCOMPATIBILITY ANTIGEN, K-B ALPHA CHAIN PRECURSOR (H-2K(B))
4335	17074	26702	1.65	2.4E-02	J06110.1	NT	T. thermophila calcium-binding 25 kDa (TCBP 25) protein mRNA, complete cds
4485	17220	28847	1.58	2.4E-02	P01901	SWISSPROT	H-2 CLASS I HISTOCOMPATIBILITY ANTIGEN, K-B ALPHA CHAIN PRECURSOR (H-2K(B))
4485	17220	28848	1.58	2.4E-02	P01901	SWISSPROT	H-2 CLASS I HISTOCOMPATIBILITY ANTIGEN, K-B ALPHA CHAIN PRECURSOR (H-2K(B))

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5068	17787	30403	0.95	2.4E-02	8922702	NT	Homo sapiens hypothetical protein FLJ10844 (FLJ10844), mRNA
6121	18899	31807	0.9	2.4E-02	W86880.1	EST_HUMAN	zh63h04.s1 Soares fetal liver spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:416791 3'
6267	19040	32016	0.58	2.4E-02	M31650.1	NT	Chicken myristoylated alanine-rich C kinase substrate (MARCKS) mRNA, complete cds
6267	19040	32017	0.58	2.4E-02	M31650.1	NT	Chicken myristoylated alanine-rich C kinase substrate (MARCKS) mRNA, complete cds
7121	19809	32875	0.8	2.4E-02	Z20573.1	EST_HUMAN	HSAAAACKVX T, Human adult Rhabdomyosarcoma cell-line Homo sapiens cDNA
7138	19825	32892	0.9	2.4E-02	X12925.1	NT	Rat gene for uncoupling protein (UCP)
7138	19826	32893	0.9	2.4E-02	X12925.1	NT	Rat gene for uncoupling protein (UCP)
7781	20486		0.72	2.4E-02	AW813007.1	EST_HUMAN	RC3-ST0186-230300-019-106 ST0186 Homo sapiens cDNA
7844	20539		0.5	2.4E-02	M16780.1	NT	Human retrotransposon 3' long terminal repeat
8340	21033		0.69	2.4E-02	H78378.1	EST_HUMAN	yu12005.s1 Soares fetal liver spleen_1NFLS Homo sapiens cDNA clone IMAGE:233576 3' similar to contains Alu repetitive element; contains A3R repetitive element;
8429	21122	34280	0.78	2.4E-02	N98442.1	EST_HUMAN	za35g11.s1 Soares fetal liver spleen_1NFLS Homo sapiens cDNA clone IMAGE:294588 3' similar to gbK020091RATSR7K Rat (RNA); contains A3R.b1 A3R repetitive element;
8685	21576	34718	0.57	2.4E-02	AE001125.1	NT	Borrelia burgdorferi (section 11 of 70) of the complete genome
							zu91c08.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:745354 3' similar to gbJ04422 ISLET
8907	21598	34740	0.78	2.4E-02	AA625680.1	EST_HUMAN	AMYLOID POLYPEPTIDE PRECURSOR (HUMAN); contains Alu repetitive element; contains element XTR
9591	22244	35427	0.52	2.4E-02	AF124100.1	NT	XTR repetitive element;
9591	22244	35428	0.52	2.4E-02	AF124100.1	NT	Arabidopsis thaliana molybdopterin synthase sulphurylase (mox5) gene, complete cds
9708	22357	35553	2.38	2.4E-02	AV692854.1	EST_HUMAN	Arabidopsis thaliana molybdopterin synthase sulphurylase (mox5) gene, complete cds
							AV692964 GKC Homo sapiens cDNA clone GKCDSC03 5'
9881	22531	35728	2.73	2.4E-02	AA493894.1	EST_HUMAN	m107b12.s1 NCI_GGAP_Thy1 Homo sapiens cDNA clone IMAGE:943583 similar to contains Alu repetitive element; contains element PTR5 repetitive element;
10512	23158		0.46	2.4E-02	BE387111.1	EST_HUMAN	601274962F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3815602 5'
11585	24164	37475	1.89	2.4E-02	AF109805.1	NT	Mus musculus major histocompatibility locus class III regions Hsc70t gene, partial cds; smRNP, G7A, NG23, MUs homolog, CLCP, NG24, NG25, and NG26 genes, complete cds; and unknown genes
11585	24164	37476	1.89	2.4E-02	AF109805.1	NT	Mus musculus major histocompatibility locus class III regions Hsc70t gene, partial cds; smRNP, G7A, NG23, MUs homolog, CLCP, NG24, NG25, and NG26 genes, complete cds; and unknown genes
11938	24495		2.28	2.4E-02	9627909	NT	Bacteriophage bIL57, complete genome
12081	24589	31124	1.91	2.4E-02	6759635	NT	Mus musculus DnB homolog 1 (E. coli) (DnB1), mRNA
12136	24825	31094	2.37	2.4E-02	BE928889.1	EST_HUMAN	MR0-FT0175-310800-202-408 FT0175 Homo sapiens cDNA
12186	24957	31093	1.89	2.4E-02	U78167.1	NT	Rattus norvegicus cAMP-regulated guanine nucleotide exchange factor 1 (cAMP-GEF1) mRNA, complete cds

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12186	24957	31104	1.86	2.4E-02	U78167.1	NT	Rattus norvegicus cAMP-regulated guanine nucleotide exchange factor I (cAMP-GEFI) mRNA, complete cds
12216	24978		1.34	2.4E-02	AF163884.1	NT	Homo sapiens SNCA isoform (SNCA) gene, complete cds, alternatively spliced
12380	24784		3.88	2.4E-02	AB008599.1	NT	Caenorhabditis elegans mRNA for iron-sulfur subunit of mitochondrial succinate dehydrogenase, complete cds
1865	14603		4.29	2.3E-02	W05340.1	EST_HUMAN	z884608.r1 Soares_fetal_lung_NHL19W Homo sapiens cDNA clone IMAGE:288284 5'
1880	14617		10.45	2.3E-02	U94166.1	NT	4 Homo sapiens mammary tumor-associated protein INT6 (INT6) gene, exon 4
2350	16072	27809	2.08	2.3E-02	Z74283.1	NT	S. cerevisiae chromosome IV reading frame ORF YDL245c
3670	16423	29064	6.19	2.3E-02	Z20377.1	EST_HUMAN	HSAAA/CADHP, Human foetal Brain Whole tissue Homo sapiens cDNA
3702	18455		0.8	2.3E-02	L23429.1	NT	Carls beta-galactosidase-binding lectin (LGALS3) mRNA, 3'end
4129	18871	28469	1.06	2.3E-02	L24789.1	NT	Gallus gallus connexin 45.6 (Cx45.6) gene, complete cds
4129	18871	29600	1.06	2.3E-02	L24789.1	NT	Gallus gallus connexin 45.6 (Cx45.6) gene, complete cds
4386	17123	29755	0.93	2.3E-02	AW869107.1	EST_HUMAN	CM4-NIN0080-280400-160-504 NIN0080 Homo sapiens cDNA
4415	17152	28780	0.86	2.3E-02	BE935225.1	EST_HUMAN	CM3-MT0118-010900-318-g07 MT0118 Homo sapiens cDNA
4415	17152	28781	0.86	2.3E-02	BE935225.1	EST_HUMAN	CM3-MT0118-010900-318-g07 MT0118 Homo sapiens cDNA
4416	17880	29782	1.14	2.3E-02	AW693693.1	EST_HUMAN	xs2508.x1 NC1 CGAP U12 Homo sapiens cDNA clone IMAGE:2770671 3'
4416	17880	29783	1.14	2.3E-02	AW693693.1	EST_HUMAN	xs2508.x1 NC1 CGAP U12 Homo sapiens cDNA clone IMAGE:2770671 3'
4555	17290	29919	2.56	2.3E-02	BF028497.1	EST_HUMAN	601672279F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3955386 5'
4555	17290	29920	2.56	2.3E-02	BF028497.1	EST_HUMAN	601672279F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3955386 5'
5291	18096	30756	3.63	2.3E-02	U86303.1	NT	Caulobacter crescentus topoisomerase IV PseE subunit (pseE) gene, complete cds, and propionyl-CoA
6522	19288	32292	4.08	2.3E-02	AL161505.2	NT	carboxylesterase beta chain (pcc8) homolog gene, partial cds
6883	17959	30513	0.69	2.3E-02	BE141476.1	EST_HUMAN	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 17
7776	20472	33595	6.28	2.3E-02	U63610.1	NT	MRO-H70080-011069-002-c09 HT0080 Homo sapiens cDNA
8370	21083	34204	0.94	2.3E-02	AJ298105.1	NT	Human plectin (PLEC1) gene, exons 3-32, and complete cds
8370	21083	34205	0.94	2.3E-02	AJ298105.1	NT	Homo sapiens PDX1 gene for lipoyl-containing component X, exons 1-11
8597	21289	34429	0.68	2.3E-02	A1683380.1	EST_HUMAN	Homo sapiens PDX1 gene for lipoyl-containing component X, exons 1-11
8597	21289	34430	0.68	2.3E-02	A1683380.1	EST_HUMAN	wa76h10.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2302147 3'
9038	21726	34890	0.98	2.3E-02	P41906	SWISSPROT	wa76h10.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2302147 3'
9759	22410	35617	0.77	2.3E-02	P50592	SWISSPROT	HYPOPHETICAL 55.6 KD PROTEIN B0280.5 IN CHROMOSOME III PRECURSOR
9829	22577	35776	1.33	2.3E-02	AE000199.1	NT	CHROMOSOME ASSEMBLY PROTEIN XCAP-C
9829	22577	35777	1.33	2.3E-02	AE000199.1	NT	Escherichia coli K-12 MG1685 section 89 of 400 of the complete genome
10524	23170	36997	0.46	2.3E-02	AF282894.1	NT	Escherichia coli K-12 MG1685 section 89 of 400 of the complete genome
						NT	Bacillus licheniformis isolate N57N1 KerA gene, partial cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10882	23373	36815	2.16	2.3E-02	P08840	SWISSPROT	GLUCOAMYLASE S1/S2 PRECURSOR (GLUCAN 1,4-ALPHA-GLUCOSIDASE) (1,4-ALPHA-D-GLUCAN GLUCOHYDROLASE)
12058	25188		5.07	2.3E-02	BE278331.1	EST_HUMAN	601178958F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3548587 5'
12862	24892	30997	2.19	2.3E-02	U39394.1	NT	Streptomyces sp. alpha-1,3/4-fucosidase precursor gene, complete cds
12816	25409		2.42	2.3E-02	U11077.1	NT	Dicystotellum discoideum extracellular signal-regulated protein kinase (ERK1) mRNA, complete cds
12807	25260		1.62	2.3E-02	11426388	NT	Homo sapiens dead finger (Droscophila)-like 1 (DRIL1), mRNA
720	13484	26147	4.13	2.2E-02	AF018287.1	NT	Columbia livia nucleoside diphosphate kinase (NDPK) gene, nuclear gene encoding mitochondrial protein, complete cds
1741	14483		1.38	2.2E-02	4557448	NT	Homo sapiens chromodomain helicase DNA binding protein 2 (CHD2) mRNA
1765	14497	27197	1.06	2.2E-02	P07313	SWISSPROT	MYOSIN LIGHT CHAIN KINASE, SKELETAL MUSCLE (MLCK)
1755	14497	27198	1.06	2.2E-02	P07313	SWISSPROT	MYOSIN LIGHT CHAIN KINASE, SKELETAL MUSCLE (MLCK)
2008	14743	27469	2.13	2.2E-02	Z82001.1	NT	S. pneumoniae popA gene and open reading frames
3428	18185		1.49	2.2E-02	AA577785.1	EST_HUMAN	m24a04.s1 NCI_CGAP_Gas1 Homo sapiens cDNA clone IMAGE:1084782 3'
3637	18390		4.01	2.2E-02	AF083094.1	NT	Infectious bursal disease virus segment B strain IL4 VP1 gene, complete cds
3834	18585	29221	1.26	2.2E-02	AW601317.1	EST_HUMAN	PMO-BT0340-170100-004-503 BT0340 Homo sapiens cDNA
3899	18649	29280	0.75	2.2E-02	Z74293.1	NT	S. cerevisiae chromosome IV reading frame ORF YDL245c
5006	17729	30333	1.05	2.2E-02	Z73597.1	NT	S. cerevisiae chromosome XVI reading frame ORF YPL241c
7146	19833	32802	3.63	2.2E-02	AV690721.1	EST_HUMAN	AV690721 GKB Homo sapiens cDNA clone GKBAND03 3'
8289	20863	34104	1.62	2.2E-02	AL161515.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 27
8289	20863	34105	1.62	2.2E-02	AL161515.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 27
8709	21401	34546	0.82	2.2E-02	X79468.1	NT	P. vulgaris alpha tub 2 mRNA
9586	22239	35422	2.22	2.2E-02	AB026898.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
9586	22239	35423	2.22	2.2E-02	AB026898.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
10105	22753		0.89	2.2E-02	6878140	NT	Mus musculus Sjogren syndrome antigen A1 (Ssa1), mRNA
11107	23834	37115	1.06	2.2E-02	BE787801.1	EST_HUMAN	601584309F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3938571 5'
11841	24425	37786	1.54	2.2E-02	11423632	NT	Homo sapiens transmembrane protein 1 (TMEM1), mRNA
12315	24737		4.07	2.2E-02	AA503553.1	EST_HUMAN	ne47n07.s1 NCI_CGAP_Cc3 Homo sapiens cDNA clone IMAGE:300541 3' similar to contains Alu repetitive element
410	13195		6.11	2.1E-02	AV781502.1	EST_HUMAN	AV781502 MDS Homo sapiens cDNA clone MDSADG01 5'
436	13222		9.98	2.1E-02	AF029728.1	NT	Dicystotellum discoideum histidine kinase C (dhcC) mRNA, complete cds

Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1240	13989	26656	10.32	2.1E-02	U72073.1	NT	Bacillus subtilis cotKLM cluster, CotK (cotK), CotL (cotL), and spore coat protein CotM (cotM) genes, complete cds
1366	14113	26787	1.21	2.1E-02	AF204395.1	NT	Mus musculus macrophage migration inhibitory factor (MIF) gene, 5' flanking region and partial cds
1366	14113	26788	1.21	2.1E-02	AF204395.1	NT	Mus musculus macrophage migration inhibitory factor (MIF) gene, 5' flanking region and partial cds
1775	14517	27218	1.06	2.1E-02	P02438	SWISSPROT	KERATIN, HIGH-SULFUR MATRIX PROTEIN, B2A
1775	14517	27219	1.08	2.1E-02	P02438	SWISSPROT	KERATIN, HIGH-SULFUR MATRIX PROTEIN, B2A
1775	14517	27220	1.06	2.1E-02	P02438	SWISSPROT	KERATIN, HIGH-SULFUR MATRIX PROTEIN, B2A
2028	14763	27492	1.2	2.1E-02	BE072546.1	EST_HUMAN	PM2-BT0546-120100-001-f11 BT0546 Homo sapiens cDNA
2028	14763	27493	1.2	2.1E-02	BE072546.1	EST_HUMAN	PM2-BT0546-120100-001-f11 BT0546 Homo sapiens cDNA
2591	15305	28041	1.32	2.1E-02	AA225085.1	EST_HUMAN	nc21g03.r1 NCI CGAP_P41 Homo sapiens cDNA clone IMAGE:1008820
2819	13534	26183	4.48	2.1E-02	N29266.1	EST_HUMAN	y43107.r1 Soares melanocyte 2N1bHM Homo sapiens cDNA clone IMAGE:284541 5'
3147	14763	27492	1.07	2.1E-02	BE072546.1	EST_HUMAN	PM2-BT0546-120100-001-f11 BT0546 Homo sapiens cDNA
3147	14763	27493	1.07	2.1E-02	BE072546.1	EST_HUMAN	PM2-BT0546-120100-001-f11 BT0546 Homo sapiens cDNA
3571	16326	26973	1	2.1E-02	AA461271.1	EST_HUMAN	z63009.r1 Soares total_fetus N62HF8 9w Homo sapiens cDNA clone IMAGE:796121 5'
4110	16853	20480	0.81	2.1E-02	Z74203.1	NT	S.cerevisiae chromosome IV reading frame ORF YDL246c
4275	17014	28641	0.81	2.1E-02	BF343655.1	EST_HUMAN	802016306F1 NCI CGAP_Bn64 Homo sapiens cDNA clone IMAGE:4151161 5'
4410	17147	28775	1.47	2.1E-02	U44914.1	NT	Borrelia burgdorferi plasmid cp32-2, erpC and erpD genes, complete cds; and unknown genes
4421	17157	28788	1.53	2.1E-02	A1788127.1	EST_HUMAN	wg81d11.x1 Soares NSF_F8_QW_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:2371509 3'
4461	17197		0.89	2.1E-02	Y18213.1	NT	Homo sapiens putative palilipA pseudogene for hair keratin, exons 2 to 7
4662	17398	30031	4.51	2.1E-02	Y08501.1	NT	A.thaliana mitochondrial genome, part A
4762	17494	30122	1.05	2.1E-02	AL163302.2	NT	Homo sapiens chromosome 21-segment HS21C102
4769	17501	30124	0.76	2.1E-02	A1823432.1	EST_HUMAN	W54405.x1 NCI CGAP_K411 Homo sapiens cDNA clone IMAGE:2384628 3'
5553	18350	31259	1.13	2.1E-02	AW378529.1	EST_HUMAN	GM4-HT0244-111199-040-105 HT0244 Homo sapiens cDNA
6966	19448	32466	0.88	2.1E-02	BF086199.1	EST_HUMAN	QV3-GN0058-120900-328-412 GN0058 Homo sapiens cDNA
8417	21110	34249	0.6	2.1E-02	9790238	NT	Mus musculus sorting nexin 1 (Snx1), mRNA
9403	22065	35236	0.5	2.1E-02	AA984288.1	EST_HUMAN	en83e07.a1 Strategene echizo brain S11 Homo sapiens cDNA clone IMAGE:1628732 3' similar to contains Alu repetitive element; contains element MER11 repetitive element;
9531	22184	35388	2.61	2.1E-02	AJ243213.1	NT	Homo sapiens partial 5-HT4 receptor gene, exons 2 to 5
9531	22184	35389	2.61	2.1E-02	AJ243213.1	NT	Homo sapiens partial 5-HT4 receptor gene, exons 2 to 5
9863	22533	35730	1.15	2.1E-02	L28324.1	NT	Streptococcus pneumoniae integrase, excisionase, repressor protein, relaxase, UmuC MucB homolog, and UmuD MucA homolog genes, complete cds; and unknown genes
9961	22609	35814	0.69	2.1E-02	AA984288.1	EST_HUMAN	en83e07.a1 Strategene echizo brain S11 Homo sapiens cDNA clone IMAGE:1628732 3' similar to contains Alu repetitive element; contains element MER11 repetitive element;
10522	23188	36395	0.45	2.1E-02	AP001519.1	NT	Bacillus halodurans genomic DNA, section 13/14

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11479	24080	37391	1.38	2.1E-02	6754265	NT	Mus musculus heat shock protein, 74 kDa, A (Hsp90a), mRNA
12296	17197		8.62	2.1E-02	Y19213.1	NT	Homo sapiens putative psittacine pseudogene for hair keratin, exons 2 to 7
12339	25163	30901	1.89	2.1E-02	L34170.1	NT	Human germline UBE1L gene similar to the gene for ubiquitin-activating enzyme, exons 1-22
12714	24988	30989	5.71	2.1E-02	AF183913.1	NT	Azospirillum brasilense major outer membrane protein OmeA precursor (omeA) gene, complete cds
16	12844	26457	1.1	2.0E-02	BF002832.1	EST_HUMAN	7q51c08.x1 NCI_CGAP_P728 Homo sapiens cDNA clone IMAGE:33099998 3' similar to contains MER1.13
17	12845	25458	14.4	2.0E-02	AW89585.1	EST_HUMAN	MER1 repetitive element;
252	13061	29698	3.76	2.0E-02	6753635	NT	QV44N0036-270400-187-h05 NIN0038 Homo sapiens cDNA
288	13094	25736	2.72	2.0E-02	AA458638.1	EST_HUMAN	Mus musculus DinB homolog 1 (E. coli) (Dinb1), mRNA
781	13553	26214	2.11	2.0E-02	6753635	NT	act15b10.r1 Soares_NIHMPU_S1 Homo sapiens cDNA clone IMAGE:813307 5'
1065	13823	26483	1.6	2.0E-02	AL068805.1	NT	Mus musculus DinB homolog 1 (E. coli) (Dinb1), mRNA
1177	13930	28595	1.17	2.0E-02	8922391	NT	Homo sapiens genomic region containing hypervariable minisatellites chromosome 1[1p36.33] of Homo sapiens
1177	13930	26596	1.17	2.0E-02	8922391	NT	Homo sapiens hypothetical protein FLJ10379 (FLJ10379), mRNA
1866	14604	27313	2.39	2.0E-02	8922453	NT	Homo sapiens hypothetical protein FLJ10379 (FLJ10379), mRNA
1866	14604	27314	2.39	2.0E-02	8922453	NT	Homo sapiens hypothetical protein FLJ10486 (FLJ10486), mRNA
2801	15506		3.24	2.0E-02	AL161632.2	NT	Homo sapiens hypothetical protein FLJ10486 (FLJ10486), mRNA
3077	12844	26457	2.11	2.0E-02	BF002832.1	EST_HUMAN	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 32
3141	15905		1.4	2.0E-02	7305474	NT	7q51c08.x1 NCI_CGAP_P728 Homo sapiens cDNA clone IMAGE:33099998 3' similar to contains MER1.13
3221	15984		2.35	2.0E-02	AF065588.1	NT	MER1 repetitive element;
3888	18736	29370	1.3	2.0E-02	M18095.1	NT	Mus musculus scema domain, transmembrane domain (TM), and cytoplasmic domain, (semaphorin) 6B (Sem6b), mRNA
5548	18345	31254	0.88	2.0E-02	U34778.1	NT	Arabidopsis thaliana C2H2 zinc finger protein FZF mRNA, complete cds
5807	18596	31523	0.7	2.0E-02	L36321.2	NT	P. vulgaris hydroxyproline-rich glycoprotein (HRGP) mRNA, 3' end
7460	20126	33217	1.11	2.0E-02	AP000004.1	NT	Caenorhabditis elegans smc-2 mRNA, complete cds
7450	20126	33218	1.11	2.0E-02	AP000004.1	NT	Dictyostelium discoideum class VII unconventional myosin (myo) gene, complete cds
9777	22428		2.21	2.0E-02	U70408.1	NT	Pyrococcus horikoshii OT3 genomic DNA, 777001-994000 nt. position (477)
10269	22907	36117	1.62	2.0E-02	A1640342.1	EST_HUMAN	Pyrococcus horikoshii OT3 genomic DNA, 777001-994000 nt. position (477)
10539	23236	36489	1.78	2.0E-02	Z73986.1	NT	Japanese encephalitis virus envelope protein mRNA, partial cds
11344	24034	37337	2.17	2.0E-02	D88184.1	NT	wa17b02.x1 NCI_CGAP_K111 Homo sapiens cDNA clone IMAGE:2238315 3'
11682	24277	37698	2.21	2.0E-02	10947055	NT	Myobacterium tuberculosis H37Rv complete genome; segment 93/162
11682	24277	37699	2.21	2.0E-02	10947055	NT	Equus caballus DNA for 17alpha-hydroxysteroid 17,20-lyase, complete cds
							Homo sapiens ankryrin 3, node of Ranvier (ankryrin G) (ANK3), transcript variant 1, mRNA
							Homo sapiens ankryrin 3, node of Ranvier (ankryrin G) (ANK3), transcript variant 1, mRNA

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11880	17609	30595	1.9	2.0E-02	AA45638.1	EST_HUMAN	aat15b10.r1 Soares NIHMPu_S1 Homo sapiens cDNA clone IMAGE:813307 5'
12338	15008		1.82	2.0E-02	AL101532.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 32
12786	28038		6.4	2.0E-02	T80037.1	EST_HUMAN	y044c09.r1 Soares Infant brain (NIB) Homo sapiens cDNA clone IMAGE:24875 5'
677	13452	28095	2.15	1.9E-02	AA572764.1	EST_HUMAN	nt10a07.s1 NCI_CGAP_P1 Homo sapiens cDNA clone IMAGE:914188 similar to contains L1.L1 L1 repetitive element:
1611	14358	27047	1.15	1.9E-02	P18488	SWISSPROT	EMPTY SPIRACLES HOMEOTIC PROTEIN
2032	14767	27406	2.68	1.9E-02	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
2032	14767	27497	2.68	1.9E-02	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
2510	15227	27968	0.97	1.9E-02	AL101550.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 50
2906	15872	28320	7.48	1.9E-02	AA713856.1	EST_HUMAN	rw04405.s1 NCI_CGAP_SS1 Homo sapiens cDNA clone IMAGE:1238337 3'
2952	15718	28369	1.66	1.9E-02	AV648689	EST_HUMAN	AV648689 GLC Homo sapiens cDNA clone GLCBLH07 3'
3598	19351		1.18	1.9E-02	N52250.1	EST_HUMAN	y228502.s1 Soares multiple sclerosis_2NIHMSIP Homo sapiens cDNA clone IMAGE:284331 3'
3681	18444		9.56	1.9E-02	BE738088.1	EST_HUMAN	801572862F1 NIH_MGC 57 Homo sapiens cDNA clone IMAGE:3839584 5'
3703	19456	29095	0.95	1.9E-02	AI301183.1	EST_HUMAN	q04407.x1 NCI_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1897260 3' similar to contains Alu repetitive element:
4025	18770	29402	1.49	1.9E-02	AF141940.1	NT	Myoplasma imitans VihA1 precursor (vihA1) and VihA2 precursor (vihA2) genes, partial cds
4170	18910	29539	1.83	1.9E-02	P09081	SWISSPROT	HOMEOTIC BICOID PROTEIN (PRD-4)
4170	18910	29540	1.83	1.9E-02	P09081	SWISSPROT	HOMEOTIC BICOID PROTEIN (PRD-4)
4504	17239	29872	3.21	1.9E-02	AI452899.1	EST_HUMAN	j46d04.x1 Soares NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:2144551 3' similar to contains Alu repetitive element:
4951	15227	27968	4.09	1.9E-02	AL161550.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 60
5233	18039	30657	0.99	1.9E-02	AF037352.1	NT	Mus musculus T cell receptor gamma locus, TCR gamma 1 and gamma 3 gene clusters
5382	18182	30872	1.41	1.9E-02	L47572.1	NT	Meleagris gallopavo paraxonase-2 (PON2) mRNA, complete cds
5701	18495		0.86	1.9E-02	AB019507.1	NT	Drosophila karekoi gene for glycerol-3-phosphate dehydrogenase, complete cds
7001	19693	32744	1.38	1.9E-02	U19241.1	NT	Homo sapiens interferon-gamma receptor alpha chain gene, exon 1
7001	19693	32745	1.38	1.9E-02	U19241.1	NT	Homo sapiens interferon-gamma receptor alpha chain gene, exon 1
8469	21161		1.23	1.9E-02	AL162754.2	NT	Neisseria meningitidis serogroup A strain Z2491 complete genome; segment 3/7
9230	21809	35082	1.03	1.9E-02	BF316129.1	EST_HUMAN	801868130F1 NIH_MGC 19 Homo sapiens cDNA clone IMAGE:3125462 5'
9613	22266	35452	0.6	1.9E-02	L10114.1	NT	Nicotiana tabacum type II phytochrome (phyB) gene, complete cds
9945	22593	35798	1.06	1.9E-02	BF685832.1	EST_HUMAN	801852385F1 NIH_MGC 66 Homo sapiens cDNA clone IMAGE:4076253 5'
10152	22860	36017	0.54	1.9E-02	D84001.1	NT	Synechocystis sp. PCC6803 complete genome, 20/27, 2539000-2844794
10881	23372	36814	1.44	1.9E-02	AF008938.1	NT	Vibrio cholerae V86 phage putative replication protein gene, complete cds
12090	25171	30903	2.82	1.9E-02	AF101065.1	NT	Hirudo medicinalis intermediate filament gliadin mRNA, complete cds
12846	25147		1.96	1.9E-02	L11098.1	NT	Candida albicans lambda Ca3B fragment



Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
336	13137	25772	1.4	1.8E-02	AW771104.1	EST_HUMAN	hm52c06.x1 NCL_CGAP_Cot17 Homo sapiens cDNA clone IMAGE:3027274 3' similar to contains element MER29 repetitive element;
670	13449	26086	0.83	1.8E-02	BF308122.1	EST_HUMAN	601894329F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4139983 5'
1137	13892	26553	1.32	1.8E-02	X17094.1	NT	H.francisci mRNA for myelin basic protein (MBP)
1416	14104	26947	1.73	1.8E-02	AF243382.1	NT	Drosophila melanogaster cytoplasmic protein encore (enc) mRNA, complete cds
2685	15394	28133	1.71	1.8E-02	AE004544.1	NT	Pseudomonas aeruginosa PAO1, section 105 of 529 of the complete genome
3205	16988		0.94	1.8E-02	AB05829.1	EST_HUMAN	hs52a09.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2090296 3'
4065	16910		0.99	1.8E-02	AA861446.1	EST_HUMAN	sk24a04.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1408635 3'
4396	17133	29764	1.17	1.8E-02	AW936363.1	EST_HUMAN	QV4-DT0021-301290-074-b11 DT0021 Homo sapiens cDNA
6712	18627	32671	5.02	1.8E-02	P14310	SWISSPROT	HYPOTHETICAL 7.9 KD PROTEIN IN FIXW 5'REGION
8028	20724	33957	0.69	1.8E-02	U37091.1	NT	Mus musculus carboxic anhydrase IV gene, complete cds
8367	21060	34200	0.91	1.8E-02	AW905327.1	EST_HUMAN	QV2-NN1073-220400-169-109 NN1073 Homo sapiens cDNA
8410	21103	34242	0.8	1.8E-02	6679843	NT	Mus musculus microtubule-associated protein 2 (Map2), mRNA
8592	22054	35225	0.49	1.8E-02	BF241924.1	EST_HUMAN	601877026F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:4105303 5'
9392	22054	35226	0.49	1.8E-02	BF241924.1	EST_HUMAN	601877026F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:4105303 5'
9542	22195		2.41	1.8E-02	AA897543.1	EST_HUMAN	sjd209.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1394921 3' similar to gb.L11672 ZINC FINGER PROTEIN 91 (HUMAN);
9663	22611	35815	1.51	1.8E-02	BE778274.1	EST_HUMAN	601463545F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3868963 5'
10128	22774	35987	1.37	1.8E-02	X96633.1	NT	L.steganiella mRNA for myomodulin neuropeptide precursor
11414	23181	38409	2.31	1.8E-02	AB002337.2	NT	Homo sapiens mRNA for KIAA0339 protein, partial cds
11414	23181	38410	2.31	1.8E-02	AB002337.2	NT	Homo sapiens mRNA for KIAA0339 protein, partial cds
11613	24211	37535	1.59	1.8E-02	AP000008.1	NT	Pyrococcus horikoshii OT3 genomic DNA, 1168001-1485000 nt. position (877)
11626	24223	37545	3.32	1.8E-02	U62749.1	NT	Zea mays acidic ribosomal protein P2a-3 (pp2a-3) mRNA, partial cds
886	13055	20323	1.86	1.7E-02	BE394866.1	EST_HUMAN	801310828F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3632190 5'
1783	14524	27230	2.17	1.7E-02	AW573183.1	EST_HUMAN	ht34e03.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2933740 3' similar to contains L1.1 L1 repetitive element;
1783	14524	27231	2.17	1.7E-02	AW573183.1	EST_HUMAN	ht34e03.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2933740 3' similar to contains L1.1 L1 repetitive element;
1864	14802		3.41	1.7E-02	AL163204.2	NT	Homo sapiens chromosome 21 segment H521C904
2108	14837		10.3	1.7E-02	AB004816.1	NT	Oryzopsis cuniculatus mRNA for mitogenin29, complete cds
2291	15016	27762	0.99	1.7E-02	S74186.1	NT	[microsatellite INRA41] [Ovis aries=sheep, Genotom, 361 nt, segment 1 of 2]
2646	15358		1.01	1.7E-02	7657495	NT	Homo sapiens putative Rab5 GTP/GTP exchange factor homologue (RABEX5), mRNA
2996	15762	28411	1.44	1.7E-02	AI147615.1	EST_HUMAN	qb22a08.x1 Soares_pregnant_uterus_NBH-PU Homo sapiens cDNA clone IMAGE:1696982 3'

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3502	16238		4.07	1.7E-02	AW827388.1	EST_HUMAN	hm45a04.x1 NCI_CGAP_RDF1 Homo sapiens cDNA clone IMAGE:3015334 3' similar to contains
3614	16367		0.73	1.7E-02	P04929	SWISSPROT	MER19.b1 MER19 repetitive element;
4148	16690		1.23	1.7E-02	AA069618.1	EST_HUMAN	HISTIDINE-RICH GLYCOPROTEIN PRECURSOR
4178	16916		2.04	1.7E-02	R02506.1	EST_HUMAN	ec1904.s1 Stratagene ovary (#637217) Homo sapiens cDNA clone IMAGE:856927 3' similar to contains Alu repetitive element; contains element MER24 repetitive element;
4420	17158	29787	1.49	1.7E-02	A1305279.1	EST_HUMAN	ye88f08.f1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:124647 5'
4491	17227	29858	1.78	1.7E-02	AW673183.1	EST_HUMAN	qm08g07.x1 NCI_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1881276 3' similar to gb:X52359 ZINC FINGER PROTEIN 30 (HUMAN);
4666	17400	30034	1.61	1.7E-02	V00841.1	NT	h334a03.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2833740 3' similar to contains L1.t1 L1 repetitive element;
4763	17495		5.84	1.7E-02	A1015076.1	EST_HUMAN	Messenger RNA for angelfish ( <i>Lophius americanus</i> ) somatostatin II
5007	17730	30334	0.69	1.7E-02	9881289	NT	ov61a02.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1840858 3'
5098	17815		0.91	1.7E-02	AJ229041.1	NT	Rattus norvegicus N-arginine diesterase 1 (Nrd1), mRNA
6035	18815	31775	2.07	1.7E-02	A1769247.1	EST_HUMAN	Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22; segment 1/3
6484	19251	32250	1.47	1.7E-02	A1838280.1	EST_HUMAN	wg35f09.x1 Soares_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:2367113 3' similar to contains Alu repetitive element;
6950	19432	32448	1.27	1.7E-02	AF180830.1	NT	ov65h03.x1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:1872681 3'
7103	19791	32856	2.44	1.7E-02	8400716	NT	Macaca fascicularis protein tyrosine phosphatase (PRL-1) mRNA, complete cds
7257	19941	33016	1.06	1.7E-02	L07899.1	NT	Homo sapiens nebulin (NEB), mRNA
7257	19941	33017	1.06	1.7E-02	L07899.1	NT	Human apolipoprotein (a) gene, exon 1
7642	20307		1.78	1.7E-02	AJ010770.1	NT	Human apolipoprotein (a) gene, exon 1
9336	20407	33523	0.88	1.7E-02	U21854.1	NT	Homo sapiens hyperion gene, exons 1-50
9598	22251	35437	1.3	1.7E-02	AL040594.1	EST_HUMAN	Caenorhabditis elegans cCAF1 protein gene, complete cds
11801	24381	37724	1.38	1.7E-02	5902007	NT	DKFZp434f0314_r1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434f0314 5'
12631	25337	30716	2.39	1.7E-02	AW903482.1	EST_HUMAN	Homo sapiens serum constituent protein (MSE55), mRNA
498	13282		3.19	1.6E-02	AL021928.1	NT	CM4-NN1030-040400-130-008 NN1030 Homo sapiens cDNA Mycobacterium tuberculosis H37Rv complete genome; segment 13/162
1653	14399	27088	1.04	1.6E-02	Y18880.1	NT	Treponema maltophilum flsB2, flsB3 and flsD genes for flagellin subunit proteins and CAP protein homologue
2246	14974	27711	0.9	1.6E-02	Q64176	SWISSPROT	LIVER CARBOXYL ESTERASE 22 PRECURSOR (EGASYN) (ESTERASE-22)
2246	14974	27712	0.9	1.6E-02	Q64176	SWISSPROT	LIVER CARBOXYL ESTERASE 22 PRECURSOR (EGASYN) (ESTERASE-22)
2570	15284	28022	1.05	1.6E-02	AJ006345.1	NT	Homo sapiens KVLOT1 gene
2649	16359	28102	1.48	1.6E-02	AA484872.1	EST_HUMAN	ne81a06.s1 NCI_CGAP_Ew1 Homo sapiens cDNA clone IMAGE:910687
2699	15408		0.96	1.6E-02	AB014534.1	NT	Homo sapiens mRNA for KIAA0634 protein, partial cds

Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3016	15782	28431	0.71	1.6E-02	AF112282.1	NT	Lassea sp. isolate lBd cytochrome oxidase III gene, partial cds; mitochondrial gene for mitochondrial product
3516	16272	28028	5.9	1.6E-02	AW850652.1	EST_HUMAN	IL3-CT0219-160200-063-C07 CT0219 Homo sapiens cDNA
3830	16581	28215	1.32	1.6E-02	AL163301.2	NT	Homo sapiens chromosome 21 segment HS21G101
4154	16898		2.49	1.6E-02	AF110520.1	NT	Mus musculus major histocompatibility complex region NG27, NG28, RPS28, NADH oxidoreductase, NG29, KIFC1, Fes-binding protein, BING1, tapasin, RelGDS-like, KE2, BING4, beta 1,3-galactosyl transferase, and RPS18 genes, complete cds; Sacm21 gene, partial>
4267	17007	29640	0.97	1.6E-02	AW875407.1	EST_HUMAN	QV2-PT0012-140100-030-07 PT0012 Homo sapiens cDNA
5536	18334	31241	1.25	1.6E-02	8671715	NT	Mus musculus CD5 antigen (Cd5), mRNA
6548	19311	32316	2.05	1.6E-02	AB015281.1	NT	Carditis albicans CaGCR3 gene, complete cds
6832	19494	32517	1.75	1.6E-02	AB027571.1	NT	Saccharomyces cerevisiae CAD2 gene for cadmium resistance protein, complete cds
6832	19494	32518	1.75	1.6E-02	AB027571.1	NT	Saccharomyces cerevisiae CAD2 gene for cadmium resistance protein, complete cds
7610	20276	33384	0.86	1.6E-02	AL161508.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 20
8020	20715	33847	0.76	1.6E-02	AJ277682.1	NT	Homo sapiens partial TUB gene for tubby (mouse) homolog and LMO1 gene for LIM domain only 1 protein
8078	20772		1.88	1.6E-02	X05151.1	NT	Human apoC-II gene for preproapolipoprotein C-II
9940	22588		2.72	1.6E-02	AF079764.1	NT	Drosophila melanogaster enhancer of polycomb (E(Pc)) mRNA, complete cds
10319	22988	36184	1.29	1.6E-02	AA572818.1	EST_HUMAN	nt18903.at NCI_CGAP_P11 Homo sapiens cDNA clone IMAGE914280 similar to SW:TELO_RABIT
10319	22988	36185	1.29	1.6E-02	AA572818.1	EST_HUMAN	nt18903.at NCI_CGAP_P11 Homo sapiens cDNA clone IMAGE914280 similar to SW:TELO_RABIT
10826	25132	36746	2.38	1.6E-02	Z94828.1	NT	P28294 TELOKIN, [1];
11174	23841	37124	2.54	1.6E-02	AL161508.2	NT	G.gallus microsalivaria DNA (LE10200 (=T168E11))
11174	23841	37125	2.54	1.6E-02	AL161508.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 20
11495	24086	37407	1.54	1.6E-02	AJ373558.1	EST_HUMAN	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 20
734	19508		23.05	1.9E-02	8923734	NT	qz86610.x1 Soares_pregnant_uterus_NibHPU Homo sapiens cDNA clone IMAGE2042442 3'
2138	14868	27598	4.24	1.9E-02	N39521.1	EST_HUMAN	Homo sapiens transcription factor (HSA130894), mRNA
2172	14901	27635	1.89	1.9E-02	AL161594.2	NT	y27507.at Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE243925 3'
3057	15823	28467	1.6	1.9E-02	AJ008216.1	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 90
3057	15823	28468	1.6	1.9E-02	AJ008216.1	NT	Homo sapiens CACNA1F gene, exons 1 to 48
3711	16464	29103	0.98	1.9E-02	BF082942.1	EST_HUMAN	Homo sapiens CACNA1F gene, exons 1 to 48
6201	18077	31955	1.88	1.9E-02	Q09711	SWISSPROT	MR4-TN0115-080900-201-012 TN0115 Homo sapiens cDNA
7219	19904		1.63	1.9E-02	11487282	NT	HYPOTHETICAL CALCULUM-BINDING PROTEIN C18B11.04 IN CHROMOSOME 1
7301	19884	33060	1.2	1.9E-02	11418713	NT	Cyanophora paradoxa cyanella, complete genome
							Homo sapiens KIAA1009 protein (KIAA1009), mRNA

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7773	20469	33592	1.63	1.5E-02	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
7781	20476	33602	3.59	1.5E-02	11417739	NT	Homo sapiens vely-IRNA synthetase 2 (VARS2), mRNA
8729	21421	34565	0.9	1.5E-02	BF345554.1	EST_HUMAN	802019135F1 NCI_CGAP_Bim67 Homo sapiens cDNA clone IMAGE:4154504 5'
8368	21043		0.51	1.5E-02	AF008774.1	NT	Homo sapiens kinase-related protein isoform 1 mRNA, complete cds
9470	22079	35251	1.47	1.5E-02	D44606.1	NT	Saccharomyces cerevisiae chromosome VI plasmid GapC
9711	22362	35559	0.96	1.5E-02	R32667.1	EST_HUMAN	yh54b10.r1 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:133531 5'
9711	22362	35560	0.98	1.5E-02	R32667.1	EST_HUMAN	yh54b10.r1 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:133531 5'
11121	23780	37068	3.49	1.5E-02	L40009.1	NT	Plasmodium falciparum (strain FOR3) variant-specific surface protein (var-2, var-3) genes, complete cds's
11163	23830	37109	2.14	1.5E-02	AL111238.1	NT	Borlyis cinerea strain T4 cDNA library under conditions of nitrogen deprivation
11858	24440	37781	1.39	1.5E-02	AL161492.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 4
12277	25214		1.74	1.5E-02	AW750834.1	EST_HUMAN	RC4-CN0049-140100-011-c11 CN0049 Homo sapiens cDNA
12787	25039		1.45	1.5E-02	A1763127.1	EST_HUMAN	w08003.x1 NCI_CGAP_GLL1 Homo sapiens cDNA clone IMAGE:2389493 3' similar to contains Alu repetitive element; contains element MER28 MSR1 repetitive element;
408	13193		2.28	1.4E-02	AE002230.2	NT	Chlamydia pneumoniae AR39, section 58 of 94 of the complete genome
1096	13854	26513	4.42	1.4E-02	7705980	NT	Homo sapiens NESH protein (LOC51225), mRNA
1234	13983		1.24	1.4E-02	U32800.1	NT	Haemophilus influenzae Rd section 115 of 163 of the complete genome
1275	14025		3.77	1.4E-02	U67779.1	NT	Xenopus laevis neurogenin related 1b (X-NGNR-1b) mRNA, complete cds
1375	14123		1.45	1.4E-02	AF216954.1	NT	Homo sapiens hecadin gene, complete cds
1507	14263		1.25	1.4E-02	AV723785.1	EST_HUMAN	AV723785 HTB Homo sapiens cDNA clone HTBAH111 5'
3207	15970	28622	2	1.4E-02	AF160969.2	NT	Bifidobacterium longum Net-H+ antiporter (nhaB), cytosine deaminase, and alpha-galactosidase (aglL) genes, complete cds; and N-acetylglucosaminylase repressor protein (nagCxyR) gene, partial cds
3393	16152	28905	1.07	1.4E-02	AW074212.1	EST_HUMAN	xb08009.x1 NCI_CGAP_GU1 Homo sapiens cDNA clone IMAGE:2575783 3'
3478	16234	28888	6.33	1.4E-02	AL161586.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 82
3478	16234	28889	6.33	1.4E-02	AL161586.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 82
3948	19401	29041	8.03	1.4E-02	6996918	NT	Mus musculus histocompatibility 2, complement component factor B (H2-Bf), mRNA
4453	17191	29817	7.77	1.4E-02	AW962686.1	EST_HUMAN	EST374761 IMAGE resequences, MAGG Homo sapiens cDNA
4455	17191	29818	7.77	1.4E-02	AW962686.1	EST_HUMAN	EST374761 IMAGE resequences, MAGG Homo sapiens cDNA
4821	17552	30174	7.21	1.4E-02	BE733142.1	EST_HUMAN	601567403F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3842280 5'
4821	17552	30175	7.21	1.4E-02	BE733142.1	EST_HUMAN	601567403F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3842280 5'
6321	19091	32079	5.47	1.4E-02	AA559030.1	EST_HUMAN	nh1c04.s1 NCI_CGAP_Br2 Homo sapiens cDNA clone IMAGE:1029990 3' similar to contains Alu repetitive element;

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6321	18081	32080	5.47	1.4E-02	AA56030.1	EST_HUMAN	nt11c04.s1 NCI_CGAP_Br2 Homo sapiens cDNA clone IMAGE:1028980 3' similar to contains Alu repetitive element
8038	20733		1.94	1.4E-02	AL022073.1	NT	Mycobacterium tuberculosis H37Rv complete genome, segment 88/162
8796	21488	34634	0.75	1.4E-02	M81702.1	NT	Candida boidinii methanol oxidase (AOD1) gene, complete cds
9053	21742	34900	0.84	1.4E-02	AJ272265.1	NT	Homo sapiens SPP2 gene for secreted phosphoprotein 24 precursor, exons 1-8
9300	21967	35141	2.27	1.4E-02	BE54691.1	EST_HUMAN	601078239F1 NIH_MGC 12 Homo sapiens cDNA clone IMAGE:3464241 5'
10455	23101		0.76	1.4E-02	AL163218.2	NT	Homo sapiens chromosome 21 segment HS21C018
11865	24526	37267	2.2	1.4E-02	X60459.1	NT	Human IFNAR gene for interferon alpha/beta receptor
12331	24747		1.37	1.4E-02	AF324985.1	NT	Arabidopsis thaliana F21J6.2 mRNA, complete cds
12601	24913		2.36	1.4E-02	11426968	NT	Homo sapiens sperm associated antigen 7 (SPAG7), mRNA
1948	14683	27395	2.21	1.3E-02	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
3208	15971	28623	2.23	1.3E-02	BF667081.1	EST_HUMAN	602129475F1 NIH_MGC 56 Homo sapiens cDNA clone IMAGE:4286203 5'
3208	15971	28624	2.23	1.3E-02	BF667081.1	EST_HUMAN	602129475F1 NIH_MGC 56 Homo sapiens cDNA clone IMAGE:4286203 5'
3951	16701		1.31	1.3E-02	AF169288.1	NT	Mus musculus beta-teroglycan gene, complete cds
4874	17601	30223	0.93	1.3E-02	U60061.1	NT	Human germline T-cell receptor beta chain TCRBV17S1A1T, TCRBV2S1, TCRBV10S1P, TCRBV28S1P, TCRBV18S1P, TCRBV15S1, TCRBV11S1A1T, HVB relic, TCRBV28S1P, TCRBV34S1, TCRBV14S1, TCRBV3S1, TCRBV4S1A1T, TRY4, TRY5, TRY6, TRY7, TRY8, TCRBD1, TCRBU1S1, TCRBU1S2, >
5166	17975	30532	1.31	1.3E-02	AL046986.2	NT	Mus musculus chromosome X contigB; X-linked lymphocyte regulated 5 gene, Zinc finger protein 275, Zinc finger protein 92, mmeq28orf
5166	17975	30533	1.31	1.3E-02	AL046986.2	NT	Mus musculus chromosome X contigB; X-linked lymphocyte regulated 5 gene, Zinc finger protein 275, Zinc finger protein 92, mmeq28orf
6072	18851	31816	1.05	1.3E-02	U80017.1	NT	Homo sapiens basic transcription factor 2 p44 (btf2p44) gene, partial cds, neuronal apoptosis inhibitory protein (nail) and survival motor neuron protein (smn) genes, complete cds
6105	18883	31851	0.88	1.3E-02	M62962.1	NT	C. reinhardtii ribulose 1,5-bisphosphate carboxylase/oxygenase activase mRNA, complete cds
6866	17842	30635	1.33	1.3E-02	AL161546.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 48
6866	17842	30636	1.33	1.3E-02	AL161546.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 48
7477	20150	33244	4.9	1.3E-02	AK01593.1	EST_HUMAN	ov00g05.x1 Soere parathyroid tumor NblHPA Homo sapiens cDNA clone IMAGE:1646072 3' similar to contains Alu repetitive element
8390	21073	34212	1.65	1.3E-02	AF156961.1	NT	Homo sapiens human endogenous retrovirus W gagC3.37 G gag (gag) gene, complete cds
10107	22765	35967	1.91	1.3E-02	M63707.1	NT	Mouse kidney androgen-regulated protein (KAP) gene, complete cds
10178	22826	36040	0.68	1.3E-02	AE001304.1	NT	Chlamydia trachomatis section 31 of 87 of the complete genome
10913	23593	36638	3.97	1.3E-02	AW268563.1	EST_HUMAN	xc34e03.x1 Soere NFL_T_QBC_S1 Homo sapiens cDNA clone IMAGE:2815036 3'
10913	23593	36639	3.97	1.3E-02	AW268563.1	EST_HUMAN	xc34e03.x1 Soere NFL_T_QBC_S1 Homo sapiens cDNA clone IMAGE:2815036 3'

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12337	25352		1.44	1.3E-02	Z89117.1	NT	Bacillus subtilis complete genome (section 14 of 21): from 2599451 to 2812870
12437	24807		2.41	1.3E-02	9633089	NT	Human herpesvirus 6B, complete genome
12807	25145		28.18	1.3E-02	AF152238.1	NT	Homo sapiens V1b vasopressin receptor (VPR3) gene, complete cds
345	13145	25783	3.48	1.2E-02	AA059239.1	EST_HUMAN	256901.1 Soares retina N2b4HR Homo sapiens cDNA clone IMAGE:381840 5' similar to contains element
440	13228	25869	1.66	1.2E-02	P38898	SWISSPROT	L1 repetitive element;
721	13495						HYPOTHETICAL 17.1 KD PROTEIN IN PUR5 3'REGION
2175	14904	26148	2.02	1.2E-02	AI183522.1	EST_HUMAN	q688e12.x1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1734870 3' similar to contains L1.H L1
2178	14907	27637	1.81	1.2E-02	AL183213.2	NT	repetitive element;
2444	15163	27940	1.71	1.2E-02	AV731704.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C013
2842	15163	27901	1.39	1.2E-02	AW172350.1	EST_HUMAN	AV731704 HTF Homo sapiens cDNA clone HTFBHG11 5'
3068	15903	27901	1.07	1.2E-02	AW172350.1	EST_HUMAN	x37d09.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2659432 3'
3281	16042	28681	6.88	1.2E-02	AA075418.1	EST_HUMAN	x37d09.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2659432 3'
3284	16045	28694	2.1	1.2E-02	R02805.1	EST_HUMAN	zm88e03.r1 Striatogene ovarian cancer (#837219) Homo sapiens cDNA clone IMAGE:545020 5'
4675	17409	30045	0.92	1.2E-02	AI988984.1	EST_HUMAN	y11b08.x1 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:138803 3'
			0.91	1.2E-02	AI987378.1	EST_HUMAN	y686d07.x5 Soares_fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:308532 3' similar to contains element MER22 repetitive element;
							wm39f04.x1 NC1_CGAP_U4 Homo sapiens cDNA clone IMAGE:2438335 3'
4859	17588	30211	2.03	1.2E-02	U91328.1	NT	Human hereditary haemochromatosis region, histone 2A-like protein gene, hereditary haemochromatosis (HLA-H) gene, RoRet gene, and sodium phosphate transporter (NPT3) gene, complete cds
4981	17704		1.13	1.2E-02	AB019788.1	NT	Gynops pyrogastris CplJbqT mRNA, partial cds
6025	17748	30358	1.41	1.2E-02	AV731704.1	EST_HUMAN	AV731704 HTF Homo sapiens cDNA clone HTFBHG11 5'
5096	18461	31375	1.73	1.2E-02	D78889.1	NT	Rana rugosa mRNA for calreticulin, complete cds
6026	18806	31787	0.72	1.2E-02	AF045555.1	NT	Homo sapiens wiscr1 (WBSOR1) and wiscr5 (WBSOR5) genes, complete cds, alternatively spliced and
6907	19845	32891	6.46	1.2E-02	AF175412.1	NT	replication factor C subunit 2 (RFC2) gene, complete cds
7192	19878	32952	1.36	1.2E-02	H02197.1	EST_HUMAN	Mus musculus DNA methyltransferase (Dnmt1) gene, exons 2, 3, 4, and 5
7212	19897	32972	10.54	1.2E-02	AV732093.1	EST_HUMAN	y34h12.s1 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:150695 3'
7456	20130	33222	0.57	1.2E-02	BF216650.1	EST_HUMAN	AV732093 HTF Homo sapiens cDNA clone HTFBHG11 5'
							601882349F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4065253 5'
7896	20581	33722	2.18	1.2E-02	Q11205	SWISSPROT	CMP-N-ACETYLNURAMINATE-BETA-GALACTOSAMIDE-ALPHA-2,3-SIALYLTRANSFERASE (BETA-
8062	20786	33917	1.35	1.2E-02	AF193612.1	NT	GALACTOSIDE ALPHA-2,3-SIALYLTRANSFERASE) (ALPHA 2,3-ST) (GAL-NAC8S) (GAL-BETA-1,3-
8092	20788	33918	1.35	1.2E-02	AF193612.1	NT	GALNAC-ALPHA-2,3-SIALYLTRANSFERASE) (ST3GAL4.2) (SIAT4-B)
							Homo sapiens fringe protein mRNA, partial cds
							Homo sapiens fringe protein mRNA, partial cds

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8788	21480		1.03	1.2E-02	T76987.1	EST_HUMAN	y472c08.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:1137743'
9539	22192	35376	2.46	1.2E-02	AB031013.1	NT	Nonwalk-like Virus genogroup 2 gene for capsid protein, complete cds
9570	22223	35408	1.35	1.2E-02	AJ248003.1	NT	Homo sapiens Speet gene for speet protein
12034	24559	31112	2.88	1.2E-02	O15534	SWISSPROT	PERIOD CIRCADIAN PROTEIN 1 (CIRCADIAN PACEMAKER PROTEIN RIGU) (HPER)
12615	24922		8.02	1.2E-02	C18119.1	EST_HUMAN	G18119 Human placenta cDNA (TFujimura) Homo sapiens cDNA clone GEN-557608 5'
1246	13995	26662	1.49	1.1E-02	AA070384.1	EST_HUMAN	zn06a11.s1 Stratagene neuroepithelium (#637231) Homo sapiens cDNA clone IMAGE:530924 3'
1701	14444	27143	1.35	1.1E-02	X75491.1	NT	H.sapiens LIPA gene, exon 4
1701	14444	27144	1.35	1.1E-02	X76491.1	NT	H.sapiens LIPA gene, exon 4
2031	14786	27495	4.92	1.1E-02	BF345263.1	EST_HUMAN	602018037F1 NCJ_CGAP_Bn67 Homo sapiens cDNA clone IMAGE:4153908 5'
2880	16647		4.05	1.1E-02	N89623.1	EST_HUMAN	zn40a06.t1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:295040 5'
3513	16289	26924	2.96	1.1E-02	AJ653508.1	EST_HUMAN	iq95b10.x1 NCJ_CGAP_Ov23 Homo sapiens cDNA clone IMAGE:2216539 3' similar to SW:XPFF_HUMAN
4086	16829		0.86	1.1E-02	AW813796.1	EST_HUMAN	Q62889 DNA-REPAIR PROTEIN COMPLEMENTING XP-F CELL ;
4778	17510	30132	1.5	1.1E-02	AL048383.2	EST_HUMAN	RC3-ST0197-120200-015-g11 ST0197 Homo sapiens cDNA
							DKFZp588E0924.s1 588 (synonym: huter1) Homo sapiens cDNA clone DKFZp588E0924
6057	18837	31798	1	1.1E-02	U68480.1	NT	Bacillus subtilis SpoVK (spvK), YnbA (ynbA), YnbB (ynbB), GlnR (glnR), glutamine synthetase (glnA), YnaA (ynaA), YnaB (ynbB), YnaC (ynbC), YnaD (ynbD), YnaE (ynbE), YnaF (ynbF), YnaG (ynbG), YnaH (ynbH), YnaI (ynbI), YnaJ (ynbJ), xylan beta-1,4-xylobi
7497	20169	33261	2.51	1.1E-02	BE149011.1	EST_HUMAN	RC1-HT0256-100300-016-h07 HT0256 Homo sapiens cDNA
8538	21230	34372	0.91	1.1E-02	AW998160.1	EST_HUMAN	QV3-BN0045-220300-128-h02 BN0045 Homo sapiens cDNA
8721	21413	34556	0.87	1.1E-02	C04803.1	EST_HUMAN	C04803 Human heart cDNA (Ynakamura) Homo sapiens cDNA clone 3NHC4040
8800	21492	34639	6.45	1.1E-02	Q61982	SWISSPROT	NEUROGENIC LOCUS NOTCH 3 PROTEIN
9828	22480	35682	2.03	1.1E-02	AA082578.1	EST_HUMAN	zn24a01.t1 Stratagene neuroepithelium NT2RAM1 637234 Homo sapiens cDNA clone IMAGE:648328 5'
9994	22842	35854	3.55	1.1E-02	AA314895.1	EST_HUMAN	EST189494 Colon carcinoma (HCC) cell line II Homo sapiens cDNA 5' end
10900	23580	36830	3.23	1.1E-02	11435505	NT	Homo sapiens T-box 5 (TBOX5), mRNA
11923	24484		4.16	1.1E-02	AA068239.1	EST_HUMAN	ab77f11.s1 Stratagene fetal retina 637202 Homo sapiens cDNA clone IMAGE:853005 3' similar to contains
12676	16829		1.82	1.1E-02	AW813796.1	EST_HUMAN	Alu repetitive element
6	12833	25448	9.16	1.0E-02	AW848120.1	EST_HUMAN	RC3-ST0197-120200-015-g11 ST0197 Homo sapiens cDNA
1513	14260	26946	1.66	1.0E-02	AW368128.1	EST_HUMAN	MR3-CT0176-111099-003-e10 CT0176 Homo sapiens cDNA
2577	16291		1.57	1.0E-02	AA806369.1	EST_HUMAN	CM2-HT0177-041099-017-h12 HT0177 Homo sapiens cDNA
3087	15852	28404	2.7	1.0E-02	BE835558.1	EST_HUMAN	cc22h08.s1 NCJ_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1350485 3'
3257	18019	28669	1.49	1.0E-02	BE968969.1	EST_HUMAN	RCO-FN0025-250500-021-d02 FN0025 Homo sapiens cDNA
3861	16611	29250	0.78	1.0E-02	AJ065086.1	EST_HUMAN	RCO-FN0025-250500-021-d02 FN0025 Homo sapiens cDNA
							60184667R1 NIH_MGC_74 Homo sapiens cDNA clone IMAGE:3933689 3'
							HA0821 Human fetal liver cDNA library Homo sapiens cDNA

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3876	16626	29284	0.7	1.0E-02	AL163302.2	NT	Homo sapiens chromosome 21 segment HS21C102
4726	17458	30094	4.24	1.0E-02	0753521	NT	Mus musculus corticotroph releasing hormone receptor 2 (Crhr2), mRNA
4793	17524	30146	5.16	1.0E-02	R08567.1	EST_HUMAN	y54h01.r1 Soares fetal liver spleen 1NfLS Homo sapiens cDNA clone IMAGE:190633 5'
5331	18134	30783	0.72	1.0E-02	H52881.1	EST_HUMAN	y338h11.r1 Soares ovary tumor Nbt-HOT Homo sapiens cDNA clone IMAGE:235841 5'
5661	18456	31370	0.57	1.0E-02	AF309388.1	NT	Mus musculus transcription complex subunit NF-A To4 (Nfatc4) gene, exons 1 and 2
6025	18805	31786	1.4	1.0E-02	AF257303.1	NT	Mus musculus synaptotagmin II (Sy2) gene, complete cds
6088	18868	31831	2.47	1.0E-02	AW577113.1	EST_HUMAN	MR4-BT0356-070100-201-H01 BT0356 Homo sapiens cDNA
6088	18868	31832	2.47	1.0E-02	AW577113.1	EST_HUMAN	MR4-BT0356-070100-201-H01 BT0356 Homo sapiens cDNA
6884	19581	32816	1.92	1.0E-02	Z29842.1	NT	Z.mays U3snRNA pseudogene
9293	21980	35183	4.19	1.0E-02	BF036331.1	EST_HUMAN	601456570F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3863177 5'
9293	21980	35184	4.19	1.0E-02	BF036331.1	EST_HUMAN	601456570F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3863177 5'
11229	23882		1.97	1.0E-02	AF167659.1	NT	Citridia fasciculate 27 kDa guide RNA-binding protein mRNA, complete cds; mitochondrial gene for mitochondrial product
11283	23925		1.46	1.0E-02	AI417061.1	EST_HUMAN	ig55h07.x1 NCL CGAP_P128 Homo sapiens cDNA clone IMAGE:2112733 3' similar to gb-X15183_cds1 HEAT SHOCK PROTEIN HSP 90-ALPHA (HUMAN); contains Alu repetitive element; contains element MER5 repetitive element;
11340	24030	37334	1.97	1.0E-02	AV780016.1	EST_HUMAN	AV780016 MDS Homo sapiens cDNA clone MDSBDC10 5'
12003	25416		1.83	1.0E-02	Q62203	SWISSPROT	SPICEOSOME ASSOCIATED PROTEIN 62 (SAP 62) (SPLICING FACTOR 3A SUBUNIT 2) (SF3A86)
12059	25189	30811	3.78	1.0E-02	AW935521.1	EST_HUMAN	RC2-DT0007-120200-016-H02 DT0007 Homo sapiens cDNA
12075	25243		5.93	1.0E-02	S70330.1	NT	Homo sapiens renal dipeptidase (RDP) gene, complete cds
12562	25299		3.74	1.0E-02	X62854.1	NT	H. sapiens gene for Me491/CD63 antigen
12803	25050	30957	1.84	1.0E-02	AB030887.1	NT	Homo sapiens WDR4 gene for WD repeat protein, complete cds
873	13642	26312	2.1	9.0E-03	AI799128.1	EST_HUMAN	wh4209.x1 NCL CGAP_Kd11 Homo sapiens cDNA clone IMAGE:2383433 3' similar to contains element MER22 repetitive element;
1241	13980		2.07	9.0E-03	BE781889.1	EST_HUMAN	601470242F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3873348 5'
1463	14211	26899	1.1	9.0E-03	AE001270.1	NT	Treponea pallidum section 86 of 87 of the complete genome
2394	15115	27852	2.48	9.0E-03	AL161559.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 59
2403	15124	27861	0.92	9.0E-03	AF090834.1	NT	Mus musculus MHC class III protein RP1 (Rp1) mRNA, partial cds
3659	16412	29060	1.21	9.0E-03	J05184.1	NT	S. adlocalerius thermophilus gene, complete cds
4927	17655	30297	1.03	9.0E-03	BE047949.1	EST_HUMAN	tz44e10.y1 NCL CGAP_Bn52 Homo sapiens cDNA clone IMAGE:2281468 5'
4984	17689	30297	0.96	9.0E-03	T70044.1	EST_HUMAN	yc17b08.s1 Stratiogene lung (#637210) Homo sapiens cDNA clone IMAGE:80819 3'
4984	17689	30298	0.96	9.0E-03	T70044.1	EST_HUMAN	yc17b08.s1 Stratiogene lung (#637210) Homo sapiens cDNA clone IMAGE:80819 3'
5720	18512		1.15	9.0E-03	AB080792.1	EST_HUMAN	wf7704.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2361631 3'
6533	19299		4.88	9.0E-03	BE145988.1	EST_HUMAN	601573438F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3834752 5'



Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7362	20043	33122	0.57	9.0E-03	AI242219.1	EST_HUMAN	q87g12.x1 Soares_NFL_I_GBC_S1 Homo sapiens cDNA clone IMAGE:1853874 3'
7371	20051	33132	0.8	9.0E-03	8922570	NT	Homo sapiens hypothetical protein FLJ10850 (FLJ10850), mRNA
7774	20470		1.05	9.0E-03	AL038901.1	EST_HUMAN	DKFZp434L0412_r1 434 (synonym: hsc3) Homo sapiens cDNA clone DKFZp434L0412 5'
8147	20841		0.65	9.0E-03	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
9745	22398	35601	0.47	9.0E-03	P28011	SWISSPROT	INTEGRIN BETA-7 PRECURSOR (INTEGRIN BETA-P) (M290 IEL ANTIGEN)
9762	22413	35620	1.44	9.0E-03	P20908	SWISSPROT	COLLAGEN ALPHA 1(V) CHAIN PRECURSOR
10907	23587		2.07	9.0E-03	Y18000.1	NT	Homo sapiens NF2 gene
10935	23615	38868	1.57	9.0E-03	BE395380.1	EST_HUMAN	801310881F1 NH_MGC_44 Homo sapiens cDNA clone IMAGE:3632181 5'
11651	24248	37568	1.55	9.0E-03	L11144.1	NT	Homo sapiens preprogalactin (GAL1) gene, exons 1, 2, and 3
11651	24248	37569	1.55	9.0E-03	L11144.1	NT	Homo sapiens preprogalactin (GAL1) gene, exons 1, 2, and 3
12411	25411		2.37	9.0E-03	BE348385.1	EST_HUMAN	hwl7b09.x1 NC1_CGAP_L24 Homo sapiens cDNA clone IMAGE:3183161 3'
12703	24983		23.46	9.0E-03	BF351141.1	EST_HUMAN	PM1-HT0462-291299-001-e09 HT0462 Homo sapiens cDNA
489	13274		4.06	8.0E-03	AA723007.1	EST_HUMAN	zh30603.s1 Soares_pituitary_gland_N3HPG Homo sapiens cDNA clone IMAGE:413598 3' similar to contains Alu repetitive element
968	13734	26399	36.32	8.0E-03	AF106856.1	NT	Homo sapiens adenylsuccinate lyase gene, complete cds
2154	14884	27617	2.2	8.0E-03	AL163283.2	NT	Homo sapiens chromosome 21 segment HS21C083
2860	15726		0.93	8.0E-03	U47048.1	NT	Escherichia coli microcin 24 region, DNA binding protein (mdbA), immunity protein (mtfI), microcin 24 (mtfS), and microcin transport protein (mtfA, mtfB) genes, complete cds
3353	16113	28768	1.08	8.0E-03	AJ131016.1	NT	Homo sapiens SCL gene locus
3685	16418	29058	1.21	8.0E-03	P32644	SWISSPROT	HYPOTHETICAL 127.0 KD PROTEIN IN RAD24-BMH1 INTERGENIC REGION
3685	16418	29059	1.21	8.0E-03	P32644	SWISSPROT	HYPOTHETICAL 127.0 KD PROTEIN IN RAD24-BMH1 INTERGENIC REGION
4350	17089	29721	4.88	8.0E-03	BF363327.1	EST_HUMAN	GM4-NIN0119-300800-223-005 NN0119 Homo sapiens cDNA
5083	17802	30420	1.09	8.0E-03	AU140261.1	EST_HUMAN	AU140261 PLACE2 Homo sapiens cDNA clone PLACE2000223 5'
5436	18235	30949	2.82	8.0E-03	AF110620.1	NT	Mus musculus major histocompatibility complex region NG27, NG28, RPS28, NADH oxidoreductase, NG29, KIFC1, Fes-binding protein, BING1, Ispahin, Raf/GDS-like, KE2, BING4, beta 1,3-galactosyl transferase, and RPS18 genes, complete cds; Sacm21 gene, partial>
6106	25085	31852	1.45	8.0E-03	AP000002.1	NT	Pyrococcus horikoshii OT3 genomic DNA, 287001-544000 nt position (277)
6651	19413	32427	4.89	8.0E-03	P55577	SWISSPROT	PROBABLE PEPTIDASE YANA
6820	19481		0.95	8.0E-03	V01109.1	NT	Human BK virus (strain MM) genome. (Closely related to SV40.)
7107	19795	32860	1.79	8.0E-03	M17197.1	NT	A. californica (marine gastropod mollusc) neuropeptide gene (bag cell), exon 1, 5' end
7442	20119		2.03	8.0E-03	AB038267.1	NT	Tursiops truncatus mRNA for p40-phox, complete cds
8781	21473	34619	0.93	8.0E-03	P98160	SWISSPROT	BASEMENT MEMBRANE-SPECIFIC HEPARAN SULFATE PROTEOGLYCAN CORE PROTEIN PRECURSOR (HSPG) (PERLECAN) (PLC)

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8808	21500	34846	3.28	8.0E-03	AW808882.1	EST_HUMAN	MR1-ST0111-111199-011-h06 ST0111 Homo sapiens cDNA
8816	21508	34893	0.49	8.0E-03	AL139075.2	NT	Campylobacter jejuni NGTC11168 complete genome; segment 2/8
8878	21569	34713	0.58	8.0E-03	9789968	NT	Mus musculus fusion 2 (human) (Fus2), mRNA
8848	22488		4.83	8.0E-03	BE088509.1	EST_HUMAN	QV1-BT0677-040400-131-g03 BT0677 Homo sapiens cDNA
10096	23357	36587	1.36	8.0E-03	BE788441.1	EST_HUMAN	601475619F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3878405 5'
10098	23586		3.58	8.0E-03	Z49862.1	NT	S. cerevisiae chromosome X reading frame ORF YJR152w
11715	24309	37632	4.74	8.0E-03	AF084589.1	NT	Homo sapiens melanoma-associated antigen (MAGE-C1) gene, complete cds
11814	24402		22.71	8.0E-03	AA018180.1	EST_HUMAN	z832e11.1 Soares retina N2b-4HR Homo sapiens cDNA clone IMAGE:380716 5'
11853	24437	37779	1.36	8.0E-03	BF342438.1	EST_HUMAN	602013941F1 NCI_CGAP_Bm64 Homo sapiens cDNA clone IMAGE:4149418 5'
11893	24491		1.74	8.0E-03	MB8035.1	NT	Oryctolagus cuniculus eIF-2a kinase mRNA, complete cds
11980	24523		1.74	8.0E-03	AB038161.1	NT	Homo sapiens ABCG1 gene for ABC transporter (ATP-binding cassette, sub-family G (WHITE), member 1), complete cds
678	13453	28098	16.15	7.0E-03	AF097183.1	NT	Cryptosporidium parvum HC-10 gene, complete cds
678	13453	28097	16.15	7.0E-03	AF097183.1	NT	Cryptosporidium parvum HC-10 gene, complete cds
956	13721	26387	3.57	7.0E-03	AF243378.1	NT	Glycine max glutathione S-transferase GST 21 mRNA, partial cds
1084	13852	28511	3.48	7.0E-03	AV731712.1	EST_HUMAN	AV731712 HTF Homo sapiens cDNA clone HTFAZF10 5'
1343	14091		2.67	7.0E-03	Q61060	SWISSPROT	FORKHEAD BOX PROTEIN D3 (HNF3JFH TRANSCRIPTION FACTOR GENESIS) (HEPATOCYTE NUCLEAR FACTOR 3 FORKHEAD HOMOLOG 2) (HNF-2)
1374	14122	28797	6.71	7.0E-03	AA688288.1	EST_HUMAN	ab79808.s1 Stratagene fetal retina 937202 Homo sapiens cDNA clone IMAGE:853145 3'
1491	14238	28924	3.37	7.0E-03	AW303598.1	EST_HUMAN	xy21b02.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2813739 3'
1735	14477	27175	1.24	7.0E-03	AW980568.1	EST_HUMAN	EST382626 MAGE resequences, MAGA Homo sapiens cDNA
1735	14477	27178	1.24	7.0E-03	AW060558.1	EST_HUMAN	EST382628 MAGE resequences, MAGA Homo sapiens cDNA
2254	15939	27722	1.86	7.0E-03	PO4929	SWISSPROT	HISTIDINE-RICH GLYCOPROTEIN PRECURSOR
3546	16301	28951	0.71	7.0E-03	AI150273.1	EST_HUMAN	q734h02.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1751055 3'
3749	16502	29137	0.8	7.0E-03	AW444463.1	EST_HUMAN	UI-H-B13-akb-c-10-Q-UJ.s1 NCI_CGAP_Sub5 Homo sapiens cDNA clone IMAGE:2733691 3'
3782	16544	29179	1.32	7.0E-03	AF198344.1	NT	Rattus norvegicus neuronal nicotinic acetylcholine receptor subunit (Alpha10) mRNA, complete cds
4000	16502	29137	0.83	7.0E-03	AW444463.1	EST_HUMAN	UI-H-B13-akb-c-10-Q-UJ.s1 NCI_CGAP_Sub5 Homo sapiens cDNA clone IMAGE:2733691 3'
4560	17296		1.24	7.0E-03	AW630888.1	EST_HUMAN	h88a05.y1 NCI_CGAP_GUI1 Homo sapiens cDNA clone IMAGE:2868636 5'
4929	17657		2.17	7.0E-03	AL163278.2	NT	Homo sapiens chromosome 21 segment HS21C07/8
5729	18521		0.75	7.0E-03	H71106.1	EST_HUMAN	y82g01.1 Soares fetal liver spleen 1NF5 Homo sapiens cDNA clone IMAGE:211824 5' similar to gb:U14723 CLUSTERIN PRECURSOR (HUMAN);
6021	25083		4.9	7.0E-03	AW861059.1	EST_HUMAN	RC1-CT0286-050400-018-c08 CT0286 Homo sapiens cDNA
6222	18998	31972	1.47	7.0E-03	W88251.1	EST_HUMAN	z533f10.1 Soares_fetal_heart_NbHH10W Homo sapiens cDNA clone IMAGE:342475 5'

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6443	19211	32207	3.44	7.0E-03	AA327129.1	EST_HUMAN	EST30674 Colon I Homo sapiens cDNA 5' end
6470	19237	32237	0.75	7.0E-03	BE657385.1	EST_HUMAN	7q34b10.x1 NCI_CGAP_Brn23 Homo sapiens cDNA clone IMAGE:3308347 3' similar to TR:Q13387
6979	19504	32529	1.67	7.0E-03	BE628133.1	EST_HUMAN	Q13387 HYPOTHETICAL PROTEIN 38408 2, contains TAR1.2 TAR1 repetitive element;
7420	20097	33184	5.48	7.0E-03	Z35838.1	NT	CM2-CT0478-230800-347-b11 CT0478 Homo sapiens cDNA
7420	20097	33185	5.48	7.0E-03	Z35838.1	NT	S.cerevisiae chromosome II reading frame ORF YBL077w
8010	20705	33833	2.47	7.0E-03	BE175667.1	EST_HUMAN	S.cerevisiae chromosome II reading frame ORF YBL077w
8511	21203	34348	0.51	7.0E-03	AF281074.1	NT	RC6-HT0582-160300-011-D02 HT0582 Homo sapiens cDNA
9297	21984		0.75	7.0E-03	AF111108.2	NT	Homo sapiens neuropilin 2 (NRP2) gene, complete cds, alternatively spliced
9495	22148	35330	0.72	7.0E-03	N52378.1	EST_HUMAN	Homo sapiens serine palmitoyl transferase, subunit II gene, complete cds; and unknown genes
9620	22273	35460	2.57	7.0E-03	P48982	SWISSPROT	y49010.a1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:246008 3' similar to contains
9620	22273	35461	2.57	7.0E-03	P48982	SWISSPROT	Alu repetitive element;
10204	22852		1.32	7.0E-03	AV687379.1	EST_HUMAN	BETA-GALACTOSIDASE PRECURSOR (LACTASE)
10384	23030		0.77	7.0E-03	A1799734.1	EST_HUMAN	BETA-GALACTOSIDASE PRECURSOR (LACTASE)
10729	23417	36658	2.63	7.0E-03	AB000882.1	NT	AV687379 GKX Homo sapiens cDNA clone GKCAF007 5'
10818	23501	36739	1.71	7.0E-03	AJ004892.1	NT	wc37a09.x1 NCI_CGAP_P28 Homo sapiens cDNA clone IMAGE:2320840 3'
10818	23501	36740	1.71	7.0E-03	AJ004892.1	NT	Boa taurus mRNA for NDP62, complete cds
10982	23657		1.29	7.0E-03	AJ242804.1	NT	Homo sapiens partial MUC5B gene, exon 1-29
12486	24833		1.79	7.0E-03	BE263253.1	EST_HUMAN	Homo sapiens partial MUC5B gene, exon 1-29
12553	24990		1.81	7.0E-03	Y17455.1	NT	Sporobolus stapitaneus mRNA for putative glycine and proline-rich protein
12891	25400		1.72	7.0E-03	AL163300.2	NT	601145164F2 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3160478 5'
1218	13999	28637	12.34	6.0E-03	AW511148.1	EST_HUMAN	Homo sapiens L5FR2 gene, penultimate exon
1218	13999	28638	12.34	6.0E-03	AW511148.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C100
2774	15479	28220	1.3	6.0E-03	AF112374.1	NT	hd22a05.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2910224 3' similar to
2893	15690	28305	3.36	6.0E-03	AA759135.1	EST_HUMAN	SW_PXR_HUMAN 075469 ORPHAN NUCLEAR RECEPTOR PXR;
2893	15690	28306	3.36	6.0E-03	AA759135.1	EST_HUMAN	hd22a05.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2910224 3' similar to
3240	16002		2.22	6.0E-03	H75690.1	EST_HUMAN	SW_PXR_HUMAN 075469 ORPHAN NUCLEAR RECEPTOR PXR;
3298	16080		1.31	6.0E-03	AF190338.1	NT	Danio rerio odorant receptor gene cluster
3377	16136	28793	1.18	6.0E-03	U90890.1	NT	sh78e11.a1 Soares_belle_NHT Homo sapiens cDNA clone 1321772 3'
							sh78e11.a1 Soares_belle_NHT Homo sapiens cDNA clone 1321772 3'
							y777904.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:211351 5'
							Notoncus sp. cytochrome c oxidase subunit II gene, partial cds; mitochondrial gene for mitochondrial product
							Fugu rubripes zinc finger protein, isoform, fatty acid binding protein, sepiapterin reductase and vasodilator

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3377	16138	28794	1.18	6.0E-03	U90880.1	NT	Fugu rubripes zinc finger protein, lectodin, fatty acid binding protein, septaplerin reductase and vasodochin genes, complete cds
3534	16200		1.19	6.0E-03	W37885.1	EST_HUMAN	z13a11.1.1 Soares_parrathyroid_tumor_NbHPA Homo sapiens cDNA clone IMAGE:322172 5'
3652	16405	29044	3.88	6.0E-03	BF610986.1	EST_HUMAN	UJ-H-B14-epm-c-06-Q-UJ.81 NCL_CGAP_Sub88 Homo sapiens cDNA clone IMAGE:3087754 3'
3692	19435	29078	1.08	6.0E-03	BE077356.1	EST_HUMAN	RC1-BT0606-280400-014-e07 BT0606 Homo sapiens cDNA
3759	16511	29147	1.22	6.0E-03	6754028	NT	Mus musculus glucosaminide-6-phosphate deaminase (Gnpl), mRNA
3902	16652	29294	0.78	6.0E-03	AW847284.1	EST_HUMAN	RC0-CT0204-240900-021-b10 CT0204 Homo sapiens cDNA
3938	16688		1.28	6.0E-03	BE250108.1	EST_HUMAN	600942904F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2859513 5'
4331	17070		1.94	6.0E-03	AD10833.1	EST_HUMAN	ov33c11.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1639124 3'
4847	17381	30013	5.67	6.0E-03	AA324242.1	EST_HUMAN	EST27116 Cerebellum II Homo sapiens cDNA 5' end similar to EST containing Alu repeat
5073	17782	30407	2.58	6.0E-03	Q62209	SWISSPROT	SYNAPTOMAL COMPLEX PROTEIN 1 (SCP-1 PROTEIN)
6061	25084	31802	0.67	6.0E-03	9627521	NT	Varicella virus, complete genome
6718	19633	32878	1.16	6.0E-03	O14994	SWISSPROT	SYNAPSIN III
6755	17924	30589	0.57	6.0E-03	BE253748.1	EST_HUMAN	601112533F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3353172 5'
7149	19836	32905	0.61	6.0E-03	AA289442.1	EST_HUMAN	EST11949 Uterus tumor I Homo sapiens cDNA 5' end
7149	19836	32906	0.91	6.0E-03	AA289442.1	EST_HUMAN	EST11949 Uterus tumor I Homo sapiens cDNA 5' end
7646	20216	33318	0.69	6.0E-03	AF128894.1	NT	Homo sapiens telomerase reverse transcriptase (TERT) gene, exons 7-16 and complete cds
7702	20365	33479	0.62	6.0E-03	P17964	SWISSPROT	RAS-RELATED PROTEIN RAP-2B
7767	20453	33578	6.9	6.0E-03	A103980.1	EST_HUMAN	ow13a04.x1 Soares_parrathyroid_tumor_NbHPA Homo sapiens cDNA clone IMAGE:1846670 3' similar to contains MER10 b1 MER10 repetitive element;
7874	20589	33685	2.17	6.0E-03	AW798337.1	EST_HUMAN	RC0-UM0051-210300-032-g02 UM0051 Homo sapiens cDNA
7945	20840		1.58	6.0E-03	BF038198.1	EST_HUMAN	601454915F1 NIH_MGC_86 Homo sapiens cDNA clone IMAGE:3858626 5'
9464	22004	35178	7.28	6.0E-03	D10548.1	NT	Subacute sclerosing panencephalitis (SSPE) virus mRNA for fusion protein
9943	22591		2.13	6.0E-03	A1432661.1	EST_HUMAN	t22c02.x1 NCL_CGAP_JQd11 Homo sapiens cDNA clone IMAGE:2131202 3' similar to SW:R13A_HUMAN
10062	22710	35928	0.86	6.0E-03	AJ011849.1	NT	P40429 60S RIBOSOMAL PROTEIN L13A ;
10194	22842		1.14	6.0E-03	AF084555.1	NT	Bacillus subtilis fenD gene
10304	22951	36166	0.69	6.0E-03	X68396.1	NT	cds
10845	23336	36575	1.75	6.0E-03	AW962164.1	EST_HUMAN	M.thermofilicicum complete plasmid pFV1 DNA
10713	23402		2.54	6.0E-03	11545814	NT	EST374237 MAGE resequences, MAGG Homo sapiens cDNA
10750	23435	36680	1.26	6.0E-03	A1420786.1	EST_HUMAN	Homo sapiens hypothalamic zinc finger protein FLJ14011 (FLJ14011), mRNA 601c12.x1 NCL_CGAP_P28 Homo sapiens cDNA clone IMAGE:2094070 3' similar to TR:O00519 O00519 FATTY ACID AMIDE HYDROLASE ;

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10750	23435	36681	1.26	6.0E-03	A1420786.1	EST_HUMAN	ts91c12.x1 NCI_CGAP_P28 Homo sapiens cDNA clone IMAGE:2094070 3' similar to TR:000519 O00519
10903	23583		4.8	6.0E-03	U14596.1	NT	FATTY ACID AMIDE HYDROLASE ;
10904	23584	36633	2.81	6.0E-03	BE737895.1	EST_HUMAN	Mus musculus zinc-finger protein mRNA, complete cds
12042	24583		3.25	6.0E-03	AF010466.1	NT	601572740F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:3839747 5'
12160	25174			6.0E-03	AE008833.1	NT	Rhodobacter capsulatus strain SB1003, partial genome
12239	25235			6.0E-03	U30790.1	NT	Methanobacterium thermoautotrophicum from bases 429192 to 450298 (section 39 of 148) of the complete genome
12660	24898		3.17	6.0E-03	U30790.1	NT	Pneumocystis carinii f. sp. ratii guanine nucleotide binding protein alpha subunit (pog1) gene, complete cds
12688	24910		1.64	6.0E-03	BE788019.1	EST_HUMAN	60148262F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3885388 5'
654	13432	26072	1.68	6.0E-03	AJ245480.1	NT	Brassica napus alg gene for S-luciferase, cultivar T2
654	13432	26073	2.7	5.0E-03	L25105.1	NT	Chlamydia trachomatis partial ORF8; aminocycl-IFNA synthase, complete cds; complete ORFA, and grpE-like protein, complete cds
655	13432	26072	2.7	5.0E-03	L25105.1	NT	Chlamydia trachomatis partial ORF8; aminocycl-IFNA synthase, complete cds; complete ORFA, and grpE-like protein, complete cds
655	13432	26073	3.73	5.0E-03	L25105.1	NT	Chlamydia trachomatis partial ORF8; aminocycl-IFNA synthase, complete cds; complete ORFA, and grpE-like protein, complete cds
1080	13948	28507	1.15	5.0E-03	AJ010457.1	NT	Chlamydia trachomatis partial ORF8; aminocycl-IFNA synthase, complete cds; complete ORFA, and grpE-like protein, complete cds
2688	15397	28135	2.5	5.0E-03	AB033006.1	NT	Chlamydia trachomatis partial ORF8; aminocycl-IFNA synthase, complete cds; complete ORFA, and grpE-like protein, complete cds
2836	15702	28351	0.88	5.0E-03	BE288057.1	EST_HUMAN	601194706F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3538798 5'
3133	15898	28543	3.82	5.0E-03	T87823.1	EST_HUMAN	ye8109.s1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:22365 3'
3152	15915		2.83	5.0E-03	AL101491.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 3
3164	15927	28575	1.3	5.0E-03	R71794.1	EST_HUMAN	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 3
3272	18033		1.12	5.0E-03	AJ297357.1	NT	y89g02.s1 Soares breast 2N1B1B Homo sapiens cDNA clone IMAGE:155696 3'
3687	18440	29082	4.03	5.0E-03	AF147449.2	NT	Homo sapiens partial LIMD1 gene for LIM domains containing protein 1 and KIAA0831 gene
3741	18494	29129	0.85	5.0E-03	U38914.1	NT	Pseudomonas aeruginosa strain PAO1 penicillin-binding protein 1B (penB) gene, complete cds
3954	18704		1.17	5.0E-03	AJ299075.1	EST_HUMAN	Citrus sinensis seed storage protein citrin mRNA, complete cds
4272	18494	29129	0.82	5.0E-03	U38914.1	NT	EST12218 Uterus tumor 1 Homo sapiens cDNA 5' end
4569	17304	29831	0.73	5.0E-03	AJ131016.1	NT	Citrus sinensis seed storage protein citrin mRNA, complete cds
4670	17404	30039	1.17	5.0E-03	AJ752367.1	EST_HUMAN	Homo sapiens SCL gene locus
5707	18501	31422	5.5	5.0E-03	P35500	SWISSPROT	cn150d2.x1 Normal Human Trabecular Bone Cells Homo sapiens cDNA clone NHTBC_cn150d2 random SODIUM CHANNEL PROTEIN PARA (PARALYTIC PROTEIN)

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5953	18735	31894	2.97	5.0E-03	000507	SWISSPROT	PROBABLE UBIQUITIN CARBOXYL-TERMINAL HYDROLASE FAF-Y (UBIQUITIN THIOLESTERASE FAF-Y) (UBIQUITIN-SPECIFIC PROCESSING PROTEASE FAF-Y) (DEUBIQUITINATING ENZYME FAF-Y) (FAT FACETS PROTEIN RELATED, Y-LINKED) (UBIQUITIN-SPECIFIC PROTEASE 8, Y CHROMOSOME)
5968	18769		0.91	5.0E-03	AE002234.2	NT	Chlamydia pneumoniae AR39, section 62 of 94 of the complete genome
8499	19284		7.58	5.0E-03	BE300091.1	EST_HUMAN	800944564T1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:2860871 3'
8746	17816	30578	7.45	5.0E-03	AB025024.1	NT	Mus musculus Amd1 gene for S-adenosylmethionine decarboxylase, complete cds
8940	19422		0.64	5.0E-03	AB038267.1	NT	Tursiops truncatus mRNA for p40-phox, complete cds
7385	20065	33143	0.73	5.0E-03	T05124.1	EST_HUMAN	EST03012 Fetal brain, Stragene (cat#636208) Homo sapiens cDNA clone HFBCE93 similar to EST containing Alu repeat
7498	20170		1.21	5.0E-03	AW854327.1	EST_HUMAN	RC3-CT0255-031099-011-407 CT0255 Homo sapiens cDNA
7687	20331	33442	7.6	5.0E-03	AB018816.1	NT	Homo sapiens MASL1 mRNA, complete cds
8119	20813	33048	0.48	5.0E-03	AW865907.1	EST_HUMAN	RC8-CT0281-081199-011-A06 CT0281 Homo sapiens cDNA
8119	20813	33949	0.48	5.0E-03	AW865907.1	EST_HUMAN	RC8-CT0281-081199-011-A05 CT0281 Homo sapiens cDNA
8137	20831	33965	3.29	5.0E-03	P48982	SWISSPROT	BETA-GALACTOSIDASE PRECURSOR (LACTASE)
8509	21201		5.63	5.0E-03	M81132.1	NT	Mouse complement receptor (CR2) mRNA, 3' and
8706	21398	34545	1.04	5.0E-03	D80723.1	NT	Escherichia coli genomic DNA. (19.1 - 19.4 min)
8838	21530	34876	0.71	5.0E-03	M25090.1	NT	Rabbit uteroglobin (UGL) gene, exon 1
9482	22135	35316	0.45	5.0E-03	P33760	SWISSPROT	SOF1 PROTEIN
9739	22360	35595	0.89	5.0E-03	L21710.1	NT	Plasmodium berghei 58 kDa phosphoprotein mRNA, partial cds
9871	22521	35716	0.7	5.0E-03	AW821888.1	EST_HUMAN	RC0-ST0379-210100-032-c02 ST0379 Homo sapiens cDNA
10057	22705	35923	0.45	5.0E-03	AA633143.1	EST_HUMAN	N48h10.s1 NCI_CGAP_P49 Homo sapiens cDNA clone IMAGE:385557
10231	22879	36091	0.51	5.0E-03	7662557	NT	Homo sapiens PRO0471 protein (PRO0471), mRNA
10377	23023		0.48	5.0E-03	AA633261.1	EST_HUMAN	ag49c10.s1 Geesler Wilms tumor Homo sapiens cDNA clone IMAGE:1126290 3'
10621	23314		4.90	5.0E-03	T18598.1	EST_HUMAN	694F Heart Homo sapiens cDNA clone 694
10859	23539	36785	3.42	5.0E-03	AW170334.1	EST_HUMAN	zn59g05.x1 Soares_NHCoc cervical tumor Homo sapiens cDNA clone IMAGE:2688040 3' similar to contains L1.12 L1 repetitive element
10859	23539	36786	3.42	5.0E-03	AW170334.1	EST_HUMAN	zn59g05.x1 Soares_NHCoc cervical tumor Homo sapiens cDNA clone IMAGE:2688040 3' similar to contains L1.12 L1 repetitive element
10971	23647	36900	1.89	5.0E-03	T49153.1	EST_HUMAN	y508a04.r1 Stragene placenta (8637225) Homo sapiens cDNA clone IMAGE:70686 5'
11021	23693	36956	1.47	5.0E-03	10946753	NT	Mus musculus hypothetical protein, MNCB-4760 (LOC58212), mRNA
11303	23962		3.54	5.0E-03	BE048055.1	EST_HUMAN	zn46c04.y1 NCI_CGAP_Brm62 Homo sapiens cDNA clone IMAGE:2291822 5'
11774	24366	37697	1.53	5.0E-03	AJ278505.1	NT	Mus musculus genomic fragment, 279 Kb, chromosome 7
11774	24365	37698	1.53	5.0E-03	AJ278505.1	NT	Mus musculus genomic fragment, 279 Kb, chromosome 7

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12176	25367		9.28	5.0E-03	AF047874.1	NT	Gallus gallus glyceraldehyde-3-phosphate dehydrogenase mRNA, complete cds
12307	24791		4.11	5.0E-03	AF067293.1	NT	Brugia malayi Y chromosome marker
12409	24792		2.52	5.0E-03	L10347.1	NT	Human pro-alpha1 type II collagen (COL2A1) gene exons 1-54, complete cds
12441	24811		1.67	5.0E-03	AA456597.1	EST_HUMAN	z75a03.s1 Soares ovary tumor NbHOT Homo sapiens cDNA clone IMAGE:806548 3' similar to
12467	25183		2.78	5.0E-03	BF572332.1	EST_HUMAN	SW:DXA2_MOUSE P14886 PROBABLE DIPHENOL OXIDASE A2 COMPONENT ;
12643	24940	30980	4.2	5.0E-03	AW449109.1	EST_HUMAN	602077774F1 NIH_MGC_62 Homo sapiens cDNA clone IMAGE:4252002 5'
12662	25263		1.76	5.0E-03	Q02388	SWISSPROT	UI-HB13-ekf-f-09-Q-UJ.s1 NCI_CGAP_Sub5 Homo sapiens cDNA clone IMAGE:2734215 3'
226	13038	25675	2.98	4.0E-03	AW500196.1	EST_HUMAN	COLLAGEN ALPHA 1(VII) CHAIN PRECURSOR (LONG-CHAIN COLLAGEN) (LC COLLAGEN)
313	13117	25755	2.29	4.0E-03	R48482.1	EST_HUMAN	UI-HF-BNO-ekc-f-04-Q-UJ.1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3078831 5'
589	13369	25997	2.69	4.0E-03	AA936339.1	EST_HUMAN	y51a04.s1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:35988 3'
857	13628	26298	2.03	4.0E-03	R48482.1	EST_HUMAN	on75g12.s1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1682568 3'
891	13660		4.84	4.0E-03	AW749101.1	EST_HUMAN	y51a04.s1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:35988 3'
1128	13884	26544	29.46	4.0E-03	AA099777.1	EST_HUMAN	RC3-BT0333-110100-012-401 BT0333 Homo sapiens cDNA
1146	13901	26563	2.4	4.0E-03	AW794740.1	EST_HUMAN	z81a08.11 Stratagene colon (#937204) Homo sapiens cDNA clone IMAGE:510968 5'
1280	14030	26899	1.57	4.0E-03	AA284374.1	EST_HUMAN	RC8-UM0014-170400-023-G01 UM0014 Homo sapiens cDNA
1581	14327		1.52	4.0E-03	AV708305.1	EST_HUMAN	z55a01.11 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:701736 5'
1737	14479	27178	2.23	4.0E-03	U33472.1	NT	AV708305 ADC Homo sapiens cDNA clone ADCAKB06 5'
2011	14746	27474	10.56	4.0E-03	AA099777.1	EST_HUMAN	Rattus norvegicus type 1 astrocyte and olfactory-imbic associated protein AT1-46 mRNA, complete cds
2244	14972		2.49	4.0E-03	BE410555.1	EST_HUMAN	z81a08.11 Stratagene colon (#937204) Homo sapiens cDNA clone IMAGE:510968 5'
2276	15002	27742	1.84	4.0E-03	AW794740.1	EST_HUMAN	601304181F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3638510 5'
2579	15283	28030	1.97	4.0E-03	U52111.2	NT	RC8-UM0014-170400-023-G01 UM0014 Homo sapiens cDNA
2579	15283	28031	1.97	4.0E-03	U52111.2	NT	Homo sapiens X28 region near ALD locus containing dual specificity phosphatase 9 (DUSP9), ribosomal protein L18a (RPL18a), Ca2+/Calmodulin-dependent protein kinase I (CAMKI), creatine transporter (CRTR), CDM protein (CDM), adrenoleukodystrophy protein >
2696	15405	28140	3	4.0E-03	AJ277365.1	NT	Homo sapiens X28 region near ALD locus containing dual specificity phosphatase 9 (DUSP9), ribosomal protein L18a (RPL18a), Ca2+/Calmodulin-dependent protein kinase I (CAMKI), creatine transporter (CRTR), CDM protein (CDM), adrenoleukodystrophy protein >
2696	15405	28141	3	4.0E-03	AJ277365.1	NT	Homo sapiens polyglutamine-containing C14ORF4 gene
2701	15409	28144	1.41	4.0E-03	AL163284.2	NT	Homo sapiens polyglutamine-containing C14ORF4 gene
3219	15982	28634	1.16	4.0E-03	BE154134.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C084
3219	15982	28635	1.16	4.0E-03	BE154134.1	EST_HUMAN	PM1-HT0340-151299-003-I08 HT0340 Homo sapiens cDNA
3521	16277	28931	0.97	4.0E-03	AW189428.1	EST_HUMAN	PM1-HT0340-151299-003-I08 HT0340 Homo sapiens cDNA
							x88f04.x1 NCI_CGAP_Co18 Homo sapiens cDNA clone IMAGE:2665279 3'

Table 4  
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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3621	16277	28932	0.97	4.0E-03	AW188426.1	EST_HUMAN	x9804.4.x1 NCL_CGAP_C018 Homo sapiens cDNA clone IMAGE:2065279 3'
3612	16365	29008	0.73	4.0E-03	Q13609	SWISSPROT	OLFACTORY RECEPTOR 511 (OLFACTORY RECEPTOR-LIKE PROTEIN OLF1)
3609	16859	29300	0.73	4.0E-03	AF080868.1	NT	Mus musculus tumor susceptibility protein 101 (tag101) gene, complete cds
3977	16726		1.95	4.0E-03	AJ011712.1	NT	Homo sapiens TNNT1 gene, exons 1-11 (and joined CDS)
5057	17776	30383	0.93	4.0E-03	AW103719.1	EST_HUMAN	xe83d03.x1 NCL_CGAP_Bm35 Homo sapiens cDNA clone IMAGE:2614460 3' similar to contains L1.L1 L1
5114	17832		0.97	4.0E-03	AA772698.1	EST_HUMAN	ae73ae05.s1 Striatogene schizo brain S11 Homo sapiens cDNA clone IMAGE:969776 3'
5194	18002	30625	1.8	4.0E-03	AF008599.1	NT	Drosophila melanogaster anoz207 (anoz207) mRNA, complete cds
5314	18118	30774	23.91	4.0E-03	AF169825.1	NT	Rattus norvegicus beta-catenin binding protein mRNA, complete cds
5705	18489	31421	2.48	4.0E-03	P04186	SWISSPROT	(HPRG)
5708	18502	31423	1.74	4.0E-03	P21849	SWISSPROT	MAJOR SURFACE-LABELLED TROPHOZONTE ANTIGEN PRECURSOR
5782	18583	31510	0.88	4.0E-03	AL133871.1	EST_HUMAN	DKFZp7811014_r1 761 (synonym: hamy2) Homo sapiens cDNA clone DKFZp7811014 5'
5993	18774		4.11	4.0E-03	U22180.1	NT	Rattus norvegicus opsin gene, complete cds
6140	18918	31888	0.95	4.0E-03	AW50572.1	EST_HUMAN	hg46d07.x1 NCL_CGAP_GC8 Homo sapiens cDNA clone IMAGE:2848852 3'
6217	18991	31987	1.6	4.0E-03	BE548453.1	EST_HUMAN	601076015F1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3481954 5'
6572	19336	32347	1.28	4.0E-03	AA813222.1	EST_HUMAN	aj32f1.1.s1 Soares_testis_NHT Homo sapiens cDNA clone 1382045 3'
6877	19594	32632	1.61	4.0E-03	U76406.1	NT	Lycopodium obscurum knotted 3 protein (TKN3) mRNA, complete cds
6970	19452	32470	0.99	4.0E-03	AL163278.2	NT	Homo sapiens chromosome 21 segment HS21C078
6970	19452	32471	0.89	4.0E-03	AL163278.2	NT	Homo sapiens chromosome 21 segment HS21C078
7098	19787	32851	3.5	4.0E-03	Q02817	SWISSPROT	MUCIN 2 PRECURSOR (INTESTINAL MUCIN 2)
7331	20013	33091	1.23	4.0E-03	AI881483.1	EST_HUMAN	b37g12.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:2271814 3'
7333	20015	33093	0.78	4.0E-03	BE570170.1	EST_HUMAN	7631b02.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3284043 3'
7424	20101		0.74	4.0E-03	X92109.1	NT	H. sapiens hcgIX gene
7843	20538	33686	0.7	4.0E-03	Q9T192	SWISSPROT	ADAM-TS 5 (A DISINTEGRIN AND METALLOPROTEINASE WITH THROMBOSPONDIN MOTIFS 5)
7847	20642	33787	5.45	4.0E-03	AF111944.1	NT	(ADAMTS-5) (ADAM-TS6) (AGGRECANASE-2) (ADMP-2) (ADAM-TS 11)
8103	20797	33928	2.06	4.0E-03	7682067	NT	Dicystotellum discoideum AX4 development protein DG1122 (DG1122) gene, partial cds
8614	21306	34448	6.98	4.0E-03	AI553983.1	EST_HUMAN	ta48b11.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2090013 3' similar to contains Alu repetitive element
8787	21479		4.25	4.0E-03	AL163206.2	NT	Homo sapiens chromosome 21 segment HS21C009
8797	21489	34635	2.97	4.0E-03	AL163278.2	NT	Homo sapiens chromosome 21 segment HS21C078
9827	22478	35879	0.67	4.0E-03	H30064.1	EST_HUMAN	yp42g12.1 Soares retina N265-IR Homo sapiens cDNA clone IMAGE:190150 5'
10275	22823	36135	1.3	4.0E-03	AL161555.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 55
10466	23112		0.45	4.0E-03	AL163281.2	NT	Homo sapiens chromosome 21 segment HS21C081



Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11074	23744	37017	4.09	4.0E-03	AL163206.2	NT	Homo sapiens chromosome 21 segment HS21C008
11777	24368	37700	1.82	4.0E-03	AE002102.1	NT	Ureaplasma urealyticum section 3 of 59 of the complete genome
12147	25385		1.78	4.0E-03	BE815173.1	EST_HUMAN	PM4-BN0138-180900-002-b08 BN0138 Homo sapiens cDNA
12187	24649		2.38	4.0E-03	BE298290.1	EST_HUMAN	601118194F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3028095 5'
12246	24694		2.27	4.0E-03	AW504273.1	EST_HUMAN	U1-HF-BN0-4p-g-04-0-U1.F1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3080622 5'
12480	24841		3.41	4.0E-03	BF224125.1	EST_HUMAN	7q74c09.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3' similar to contains Alu repetitive element/contains element MER31 repetitive element;
12521	25293		2.08	4.0E-03	AW614596.1	EST_HUMAN	hh02c07.x1 NCI_CGAP_K0111 Homo sapiens cDNA clone IMAGE:2853932 3' similar to contains element LTR5 repetitive element;
12801	25048	30966	2.17	4.0E-03	11436855	NT	Homo sapiens Grib2-associated binder 2 (KIA00671), mRNA
382	13180	25803	2.38	3.0E-03	AF011820.1	NT	Homo sapiens protein kinase CK2 catalytic subunit alpha gene, exon 1
859	13628	26299	5.37	3.0E-03	AF011820.1	NT	Homo sapiens protein kinase CK2 catalytic subunit alpha gene, exon 1
1857	14403	27091	3.35	3.0E-03	AA488110.1	EST_HUMAN	nc73c06.a1 NCI_CGAP_Py2 Homo sapiens cDNA clone IMAGE:782984 similar to contains Alu repetitive element;
2255	14982		1.38	3.0E-03	AF055096.1	NT	Homo sapiens MHC class 1 region
2292	15017		6.44	3.0E-03	Z32621.1	NT	S.cereale (cv. Halo) mRNA for triosephosphate isomerase
2293	15018	27753	1.09	3.0E-03	U48858.1	NT	Mus musculus intestinal trefoil factor gene, partial cds
2293	15018	27754	1.09	3.0E-03	U48858.1	NT	Mus musculus intestinal trefoil factor gene, partial cds
3081	15846	28488	3.31	3.0E-03	BE379206.1	EST_HUMAN	601237982F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3608633 5'
3149	15912	28557	2.52	3.0E-03	AW802887.1	EST_HUMAN	IL2-UM0078-240300-058-D03 UM0078 Homo sapiens cDNA
3412	16170	28819	1.72	3.0E-03	U34808.1	NT	Mus musculus alpha-1(XVII) collagen (COL18A1) gene, exon 1 and 2
3420	16177		5.97	3.0E-03	Y12500.1	NT	C.elegans samdo gene
3959	16708	29348	6.97	3.0E-03	AV762392.1	EST_HUMAN	AV762392 MDS Homo sapiens cDNA clone MDSBSG01 5'
3959	16708	29349	6.97	3.0E-03	AV762392.1	EST_HUMAN	AV762392 MDS Homo sapiens cDNA clone MDSBSG01 5'
4016	16762	29390	1.35	3.0E-03	AI792278.1	EST_HUMAN	af04f09.y5 Geesler Wilms tumor Homo sapiens cDNA clone IMAGE:1155589 5'
4130	16872		1	3.0E-03	Z32621.1	NT	S.cereale (cv. Halo) mRNA for triosephosphate isomerase
4394	17102	29737	5.63	3.0E-03	AJ011432.1	NT	Rattus norvegicus gdnf gene
4428	17164		0.73	3.0E-03	BE348739.1	EST_HUMAN	h08g08.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3151834 3'
4482	17217	29844	4.97	3.0E-03	AI508141.1	EST_HUMAN	xa8.P10.H3 conorm Homo sapiens cDNA 3'
4782	17514	30136	2.38	3.0E-03	AI732764.1	EST_HUMAN	ab18a08.x5 Stragene lung (#837210) Homo sapiens cDNA clone IMAGE:841142 3' similar to contains Alu repetitive element
4802	17533	30155	7.94	3.0E-03	BE787945.1	EST_HUMAN	601482715F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3885483 5'
5184	17892	30508	3.98	3.0E-03	8922499	NT	Homo sapiens hypothetical protein FLJ10539 (FLJ10539), mRNA
5488	18287	31159	1.98	3.0E-03	AJ249981.1	NT	Mus musculus mRNA for hypothetical protein (ORF2 ortholog)

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5538	18337	31244	0.99	3.0E-03	U35323.1	NT	Mus musculus H2-M alpha chain (H2-Ma) gene, H2-M beta 2 chain (H2-Mb2) gene, H2-M beta 1 chain (H2-Mb1) gene, low molecular weight protein 2 Lmp2 (Lmp2) gene, complete cds
6458	19225	32225	11.75	3.0E-03	AA456701.1	EST_HUMAN	aa13f10.r1 Soares_NHMPu_S1 Homo sapiens cDNA clone IMAGE:813163 5'
7104	19782	32857	1.38	3.0E-03	AJ011419.1	NT	Kluyveromyces marxianus pop3 gene for purine-cytosine permease
7422	20089	33187	3.04	3.0E-03	AB021736.1	NT	Oryza sativa gene for bZIP protein, complete cds
7839	20534	33661	0.82	3.0E-03	BF333098.1	EST_HUMAN	RCO-BT0812-250800-032-e07 BT0812 Homo sapiens cDNA
7839	20534	33662	0.82	3.0E-03	BF333098.1	EST_HUMAN	RCO-BT0812-250800-032-e07 BT0812 Homo sapiens cDNA
8056	20750	33881	1.54	3.0E-03	N92590.1	EST_HUMAN	zb27b04.s1 Soares_papillary_tumor_NbHPA Homo sapiens cDNA clone IMAGE:304783 3'
8214	20908		0.61	3.0E-03	M63498.1	NT	S. cerevisiae UGA36 gene, complete cds
8360	21053	34104	1.32	3.0E-03	P51989	SWISSPROT	HETEROGENEOUS NUCLEAR RIBONUCLEOPROTEIN A2 HOMOLOG 1 (HNRNP A2(A))
8381	21074	34213	1.47	3.0E-03	AL163268.2	NT	Homo sapiens chromosome 21 segment HS21C068
8485	21177		1.29	3.0E-03	Q9QM81	SWISSPROT	NONSTRUCTURAL PROTEIN V
8690	21581		11.08	3.0E-03	AW613774.1	EST_HUMAN	h180f10.x1 NCL_CGAP_GU1 Homo sapiens cDNA clone IMAGE:2889131 3' similar to contains L1.t1.L1 repetitive element;
8943	21634	34778	4.01	3.0E-03	AL161589.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 85
8967	21657	34808	0.44	3.0E-03	AJ010731.1	EST_HUMAN	ov03d12.x1 NCL_CGAP_Kd3 Homo sapiens cDNA clone IMAGE:1636247 3' similar to gb.X57158_rna1 HISTONE H2B.2 (HUMAN);
8971	21667	34817	0.73	3.0E-03	BF338078.1	EST_HUMAN	602035680F1 NCL_CGAP_Bm64 Homo sapiens cDNA clone IMAGE:4183938 5'
9309	21976		0.83	3.0E-03	D60601.1	NT	Synochocystis sp. PCC6803 complete genome, 3/27, 271600-402289
9347	20418	33538	0.83	3.0E-03	BE154670.1	EST_HUMAN	PM3-HT0344-071299-003-d07 HT0344 Homo sapiens cDNA
9536	22189		0.54	3.0E-03	P03355	SWISSPROT	POL POLYPROTEIN [CONTAINS: PROTEASE; REVERSE TRANSCRIPTASE; RIBONUCLEASE H]
9606	22259		3.88	3.0E-03	P08672	SWISSPROT	CIRCUMSPOROZITE PROTEIN PRECURSOR (CS)
9795	22446	35051	1.3	3.0E-03	P11369	SWISSPROT	RETROVIRUS-RELATED POL POLYPROTEIN [CONTAINS: REVERSE TRANSCRIPTASE; ENDONUCLEASE]
9890	22546	35740	1.26	3.0E-03	P51989	SWISSPROT	HETEROGENEOUS NUCLEAR RIBONUCLEOPROTEIN A2 HOMOLOG 1 (HNRNP A2(A))
10040	22688	36906	3.97	3.0E-03	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
10752	23437		1.9	3.0E-03	5803028	NT	Homo sapiens ATP/GTP-binding protein (HEAB), mRNA
11137	20099	33187	2.65	3.0E-03	AB021736.1	NT	Oryza sativa gene for bZIP protein, complete cds
11363	24043	37346	1.69	3.0E-03	AF009222.1	NT	Pneumocystis carinii laetrin-like serine endoprotease mRNA, partial cds
11424	23191	36422	2.52	3.0E-03	AF268285.1	NT	Homo sapiens golgin-like protein (GLP) gene, complete cds
11462	24065	37372	2.72	3.0E-03	AF094481.1	NT	Homo sapiens trinucleotide repeat DNA binding protein p20-CGGBP (CGGBP) gene, complete cds
11462	24065	37373	2.72	3.0E-03	AF094481.1	NT	Homo sapiens trinucleotide repeat DNA binding protein p20-CGGBP (CGGBP) gene, complete cds
11543	24143	37452	1.58	3.0E-03	P11369	SWISSPROT	RETROVIRUS-RELATED POL POLYPROTEIN [CONTAINS: REVERSE TRANSCRIPTASE; ENDONUCLEASE]

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11784	24374		1.48	3.0E-03	AW204812.1	EST_HUMAN	UI-H-B12-sh1-d-08-0-J1.s1 NCL_CGAP_Sub4 Homo sapiens cDNA clone IMAGE:2726842 3'
11927	25196		2.88	3.0E-03	A1525086.1	EST_HUMAN	prominase-5.E07.r bYumor Homo sapiens cDNA 5'
11982	24510	37256	1.88	3.0E-03	AA663164.1	EST_HUMAN	o47b10.s1 Soares total_fetus Nb2HF8_9w Homo sapiens cDNA clone IMAGE:1622779 3' similar to contains L1.13 MER28 repetitive element;
12018	25321		2.28	3.0E-03	AB009688.1	NT	Homo sapiens gene for GMP-N-acetylneuraminic acid hydroxylase, partial cds
12180	24661	31068	2.71	3.0E-03	A1296282.1	NT	Rattus norvegicus mRNA for connexin36 (cx36 gene)
502	13288	25019	1.83	2.0E-03	Q04652	SWISSPROT	RING CANAL PROTEIN (KELCH PROTEIN)
502	13288	25920	1.83	2.0E-03	Q04652	SWISSPROT	RING CANAL PROTEIN (KELCH PROTEIN)
768	15552		12.31	2.0E-03	T70874.1	EST_HUMAN	y415h03.r1 Soares fetal liver spleen 1NfLS Homo sapiens cDNA clone IMAGE:108341 5'
1342	14090	26768	2.07	2.0E-03	M20783.1	NT	Human alpha-2-plasmin inhibitor gene, exons 6 and 7
1345	14093	26768	1.4	2.0E-03	AA661605.1	EST_HUMAN	hu6601.s1 NCL_CGAP_Alv1 Homo sapiens cDNA clone IMAGE:1217583
1354	14102	26777	16.16	2.0E-03	AF284446.1	NT	Homo sapiens tumor-related protein DRC2 (DRC2) gene, complete cds
1473	14220	26906	1.73	2.0E-03	P48509	SWISSPROT	PLATELET-ENDOTHELIAL TETRASPAN ANTIGEN 3 (PETA-3) (GP27) (MEMBRANE GLYCOPROTEIN SFA-1) (CD151 ANTIGEN)
1506	14252	26938	1.84	2.0E-03	4557836	NT	Homo sapiens procollagen-lysine, 2-oxoglutarate 5-dioxygenase (lysine hydroxylase, Ehlers-Danlos syndrome type VI) (PLOD) mRNA
1506	14252	26939	1.84	2.0E-03	4557836	NT	Homo sapiens procollagen-lysine, 2-oxoglutarate 5-dioxygenase (lysine hydroxylase, Ehlers-Danlos syndrome type VI) (PLOD) mRNA
1586	14332		6.31	2.0E-03	P29400	SWISSPROT	COLLAGEN ALPHA 5(V) CHAIN PRECURSOR
1764	14506	27207	1.13	2.0E-03	AA460198.1	EST_HUMAN	z42a10.r1 Soares total_fetus Nb2HF8_9w Homo sapiens cDNA clone IMAGE:789114 5'
1872	14610		1.01	2.0E-03	BE144908.1	EST_HUMAN	CM2-HT0183-061089-018-003 HT0183 Homo sapiens cDNA
1888	14724	27445	1.57	2.0E-03	AF302691.1	NT	Mus musculus myelin expression factor-3-like protein gene, partial cds
2247	14975	27713	1.16	2.0E-03	AL183302.2	NT	Homo sapiens chromosome 21 segment HS21C102
2658	15272	28007	4.01	2.0E-03	AF187974.1	NT	8 Homo sapiens concentrative nucleoside transporter (CNT1) gene, exon 12
2658	15272	28008	4.01	2.0E-03	AF187974.1	NT	8 Homo sapiens concentrative nucleoside transporter (CNT1) gene, exon 12
2584	15298		4.57	2.0E-03	AW137782.1	EST_HUMAN	UI-H-B11-ed1-g-10-0-J1.s1 NCL_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2717010 3'
3411	16169	28818	4.3	2.0E-03	AA450198.1	EST_HUMAN	z42a10.r1 Soares total_fetus Nb2HF8_9w Homo sapiens cDNA clone IMAGE:789114 5'
3417	16174	28823	1.13	2.0E-03	BF686855.1	EST_HUMAN	60218390T1 NIH_MGC 42 Homo sapiens cDNA clone IMAGE:4300070 3'
3667	18410	28048	6.62	2.0E-03	X87344.1	NT	H.sapiens DMA, DMB, HLA-Z1, IPP2, LMP2, TAP1, LMP7, TAP2, DOB, DOB2 and RING8, 9, 13 and 14 genes
4063	18835	29461	1.96	2.0E-03	P03374	SWISSPROT	ENV POLYPROTEIN [CONTAINS: COAT PROTEIN GP52; COAT PROTEIN GP38]
4195	16036		11.03	2.0E-03	U68491.1	NT	Rattus norvegicus 5-hydroxytryptamine7 receptor gene, partial cds
4393	17130		1.12	2.0E-03	AW297380.1	EST_HUMAN	UI-H-BW0-ak-g-03-0-J1.s1 NCL_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:2730413 3'
4397	17134	28765	0.97	2.0E-03	A1064746.1	EST_HUMAN	HA0507 Human fetal liver cDNA library Homo sapiens cDNA

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4509	17244	29877	2.2	2.0E-03	L42612.1	NT	Drosophila melanogaster shorttailed class 2 (sta) mRNA, complete cds
4509	17244	29878	2.2	2.0E-03	L42512.1	NT	Drosophila melanogaster shorttailed class 2 (sta) mRNA, complete cds
4863	17397		1.84	2.0E-03	R87773.1	EST_HUMAN	y04502.s1 Scores adult brain N2b4H55Y Homo sapiens cDNA clone IMAGE:180890 3'
4956	17682	30290	2.57	2.0E-03	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
5092	17811	30427	1	2.0E-03	BE788380.1	EST_HUMAN	601583004F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:383760 5'
5399	18199	30883	1.38	2.0E-03	BF241410.1	EST_HUMAN	601876385F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:4104802 5'
5540	25070	31245	2.06	2.0E-03	AB014593.1	NT	Homo sapiens mRNA for KIAA0693 protein, partial cds
5623	18420	31333	1.86	2.0E-03	U63711.1	NT	Xenopus laevis xellin mRNA, complete cds
6019	18800	31760	3.68	2.0E-03	P23477	SWISSPROT	ATP-DEPENDENT NUCLEASE SUBUNIT B
6019	18800	31761	3.68	2.0E-03	P23477	SWISSPROT	ATP-DEPENDENT NUCLEASE SUBUNIT B
6253	19027	32001	2.17	2.0E-03	Q95203	SWISSPROT	CARBONIC ANHYDRASE-RELATED PROTEIN 2 PRECURSOR (CARP 2) (CA-RP II) (CA-XI)
6253	19027	32002	2.17	2.0E-03	Q95203	SWISSPROT	CARBONIC ANHYDRASE-RELATED PROTEIN 2 PRECURSOR (CARP 2) (CA-RP II) (CA-XI)
6255	19029	32004	7.5	2.0E-03	BF308187.1	EST_HUMAN	601887434F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4121408 5'
6291	19084	32046	2.44	2.0E-03	Q9JUP4	SWISSPROT	ADAM-TS 7 PRECURSOR (A DISINTEGRIN AND METALLOPROTEINASE WITH THROMBOSPONDIN MOTIFS 7) (ADAMTS-7) (ADAM-TS7)
6292	19085	32047	0.98	2.0E-03	AV709075.1	EST_HUMAN	AV709075 ADC Homo sapiens cDNA clone ADCAEF09 5'
6320	19090	32078	1.62	2.0E-03	X94451.1	NT	L. esculentum mRNA for lysyl-RNA synthetase (LysRS)
6506	19271		1.16	2.0E-03	A1991088.1	EST_HUMAN	wc38h09.x1 Scores Dieckgrafe colon_NHCD Homo sapiens cDNA clone IMAGE:2522177 3' similar to SW:RL29_HUMAN P47914 60S RIBOSOMAL PROTEIN L28; contains element MSR1 repetitive element;
6541	19306	32311	0.61	2.0E-03	AA677831.1	EST_HUMAN	z13a11.s1 Scores fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:430652 3'
6862	17939	30575	1.52	2.0E-03	AB038502.1	NT	Caenorhabditis elegans mRNA for galectin LEC-11, complete cds
6939	19674	32720	0.6	2.0E-03	5031864	NT	Homo sapiens lipoma HMGIC fusion partner (LHFP) mRNA
6939	19674	32721	0.6	2.0E-03	5031864	NT	Homo sapiens lipoma HMGIC fusion partner (LHFP) mRNA
6981	19606	32631	3.66	2.0E-03	BE067288.1	EST_HUMAN	CM4-BT0368-061290-054-d01 BT0368 Homo sapiens cDNA
7044	19735	32795	0.98	2.0E-03	A1298883.1	EST_HUMAN	gm98d11.x1 NCI_CQAP_Lu6 Homo sapiens cDNA clone IMAGE:1868885 3'
7193	19879	32853	0.8	2.0E-03	T86586.1	EST_HUMAN	y477g10.11 Scores fetal liver spleen_1NFLS Homo sapiens cDNA clone IMAGE:114306 5'
7517	20188	33281	1.18	2.0E-03	P07354	SWISSPROT	PROTEOGLYCAN LINK PROTEIN PRECURSOR (CARTILAGE LINK PROTEIN) (LP)
7950	20645	33789	1.96	2.0E-03	AW592004.1	EST_HUMAN	h537b06.x1 Scores_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2834035 3' similar to TR:Q00976 Q00976 JERKY.;
8116	20810	33944	6.07	2.0E-03	N20287.1	EST_HUMAN	y442g06.s1 Scores melanocyte 2N1bHM Homo sapiens cDNA clone IMAGE:284442 3' similar to contains L1.b2 L1 repetitive element;

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8110	20810	33945	6.07	2.0E-03	N20287.1	EST_HUMAN	y42g06.s1 Soares melanocyte 2Nblm Homo sapiens cDNA clone IMAGE:284442 3' similar to contains L1.62 L1 repetitive element;
8162	20856	33987	0.54	2.0E-03	Q82360	SWISSPROT	HYPOTHETICAL 32.8 KD PROTEIN O6G9.05 IN CHROMOSOME 1
8184	20878	34015	1.19	2.0E-03	P19137	SWISSPROT	LAMININ ALPHA-1 CHAIN PRECURSOR (LAMININ A CHAIN)
8239	20933	34069	0.81	2.0E-03	6005855	NT	Homo sapiens Retina-derived POU-domain factor-1 (RPF-1), mRNA
8239	20933	34070	0.81	2.0E-03	6005855	NT	Homo sapiens Retina-derived POU-domain factor-1 (RPF-1), mRNA
8284	20958	34097	0.88	2.0E-03	AU136679.1	EST_HUMAN	AU136679 PLACE1 Homo sapiens cDNA clone PLACE1004839 5'
8318	21011		0.91	2.0E-03	AJ400877.1	NT	Homo sapiens ASCL3 gene, OEGP1 gene, C11orf14 gene, C11orf15 gene, C11orf16 gene and C11orf17 gene
8570	21282	34400	0.54	2.0E-03	AB035256.1	NT	Oryzobolus curvulus mRNA for eukaryotic polypeptide chain release factor 3, partial cds
9094	18419	31331	0.74	2.0E-03	AW798111.1	EST_HUMAN	MR2-UM0025-300300-102-402 UM0025 Homo sapiens cDNA
9094	18419	31332	0.74	2.0E-03	AW798111.1	EST_HUMAN	MR2-UM0025-300300-102-402 UM0025 Homo sapiens cDNA
9139	21827	34892	0.64	2.0E-03	AF224696.1	NT	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
9426	22104	35276	0.89	2.0E-03	H50832.1	EST_HUMAN	y88a09.s1 Soares fetal liver spleen 1NfLS Homo sapiens cDNA clone IMAGE:194286 3'
9426	22104	35277	0.89	2.0E-03	H50832.1	EST_HUMAN	y88a09.s1 Soares fetal liver spleen 1NfLS Homo sapiens cDNA clone IMAGE:194286 3'
9458	22008	35178	3.46	2.0E-03	P24821	SWISSPROT	TENASCIN PRECURSOR (TN) (HEXABRACHION) (CYTOTACTIN) (NEURONECTIN) (NMEM) (JI) (MOTENDINOUS ANTIGEN) (GLIOMA-ASSOCIATED-EXTRACELLULAR MATRIX ANTIGEN) (GP 150-226) (TENASCIN-C) (TN-C)
9566	22219	35404	1.38	2.0E-03	P49882	SWISSPROT	BETA-GALACTOSIDASE PRECURSOR (LACTASE)
9566	22219	35405	1.38	2.0E-03	P49882	SWISSPROT	BETA-GALACTOSIDASE PRECURSOR (LACTASE)
9623	22276	35484	0.53	2.0E-03	AF087732.1	NT	Homo sapiens caspase recruitment domain-containing protein (BCL10) gene, complete cds
9623	22276	35485	0.53	2.0E-03	AF087732.1	NT	Homo sapiens caspase recruitment domain-containing protein (BCL10) gene, complete cds
9815	22486	35668	0.81	2.0E-03	AW884269.1	EST_HUMAN	QV3-OT0084-060400-144-e01 OT0084 Homo sapiens cDNA
9942	22590		5.75	2.0E-03	AA261378.1	EST_HUMAN	za10a08.s1 NCL CGAP GC81 Homo sapiens cDNA clone IMAGE:084754 3'
10506	23152	36377	0.45	2.0E-03	AW361176.1	EST_HUMAN	RC1-CT0251-141099-012-d01 CT0251 Homo sapiens cDNA
10506	23152	36378	0.45	2.0E-03	AW361176.1	EST_HUMAN	RC1-CT0251-141099-012-d01 CT0251 Homo sapiens cDNA
10638	23618		2.97	2.0E-03	M86524.1	NT	Human dystrophin gene
11470	20188	33281	2.56	2.0E-03	P07354	SWISSPROT	PROTEOGLYCAN LINK PROTEIN PRECURSOR (CARTILAGE LINK PROTEIN) (LP)
11531	24131		2.14	2.0E-03	BF330808.1	EST_HUMAN	RC3-BT0333-310800-115-g04 BT0333 Homo sapiens cDNA
11538	24138	37446	9.1	2.0E-03	Z11740.1	NT	H. sapiens variable tandem repeat (VNTR) locus DNA
11909	24473		3.23	2.0E-03	AJ625745.1	EST_HUMAN	y55h03.x1 NCL CGAP Kid11 Homo sapiens cDNA clone IMAGE:2283989 3' similar to SW.VATG_MANSE
11928	24487	37807	2.41	2.0E-03	AF157516.2	NT	Q25532 VACUOLAR ATP SYNTHASE SUBUNIT G; Homo sapiens SEL1L (SEL1L) gene, partial cds

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11949	24502	37810	2.41	2.0E-03	AI084325.1	EST_HUMAN	oy43g06.s1 Soares_parityodd_tumor_NbHPA Homo sapiens cDNA clone IMAGE:1688634 3' similar to TR:P97535 P97535 PS-PLA1 PRECURSOR.
11972	17907		9.37	2.0E-03	AJ245187.1	NT	Canis lupus familiaris cyp19 gene for immunoglobulin heavy chain variable region
12172	25361		2.98	2.0E-03	AV087908.1	EST_HUMAN	AV087908 GKC Homo sapiens cDNA clone GKCGXD05 5'
12262	24707	31050	1.76	2.0E-03	Y00508.1	NT	H. sapiens M1 gene for muscarinic acetylcholine receptor
12433	25224		1.48	2.0E-03	AI375037.1	EST_HUMAN	fa63f02.x1 Soares_total_fetus_Nb2HF8_Ow Homo sapiens cDNA clone IMAGE:2048061 3' similar to contains Alu repetitive element;
12542	24882		1.84	2.0E-03	AF128788.1	NT	Homo sapiens MSH55 gene, partial cds; and CLIC1, DDAH, G6b, G6c, G5b, G5d, G5e, G5f, G5g, G5h, G5i, G5j, G5k, G5l, G5m, G5n, G5o, G5p, G5q, G5r, G5s, G5t, G5u, G5v, G5w, G5x, G5y, G5z, G6a, G6b, G6c, G6d, G6e, G6f, G6g, G6h, G6i, G6j, G6k, G6l, G6m, G6n, G6o, G6p, G6q, G6r, G6s, G6t, G6u, G6v, G6w, G6x, G6y, G6z, G7a, G7b, G7c, G7d, G7e, G7f, G7g, G7h, G7i, G7j, G7k, G7l, G7m, G7n, G7o, G7p, G7q, G7r, G7s, G7t, G7u, G7v, G7w, G7x, G7y, G7z, G8a, G8b, G8c, G8d, G8e, G8f, G8g, G8h, G8i, G8j, G8k, G8l, G8m, G8n, G8o, G8p, G8q, G8r, G8s, G8t, G8u, G8v, G8w, G8x, G8y, G8z, G9a, G9b, G9c, G9d, G9e, G9f, G9g, G9h, G9i, G9j, G9k, G9l, G9m, G9n, G9o, G9p, G9q, G9r, G9s, G9t, G9u, G9v, G9w, G9x, G9y, G9z, G10a, G10b, G10c, G10d, G10e, G10f, G10g, G10h, G10i, G10j, G10k, G10l, G10m, G10n, G10o, G10p, G10q, G10r, G10s, G10t, G10u, G10v, G10w, G10x, G10y, G10z, G11a, G11b, G11c, G11d, G11e, G11f, G11g, G11h, G11i, G11j, G11k, G11l, G11m, G11n, G11o, G11p, 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G69c, G69d, G69e, G69f, G69g, G69h, G69i, G69j, G69k, G69l, G69m, G69n, G69o, G69p, G69q, G69r, G69s, G69t, G69u, G69v, G69w, G69x, G69y, G69z, G70a, G70b, G70c, G70d, G70e, G70f, G70g, G70h, G70i, G70j, G70k, G70l, G70m, G70n, G70o, G70p, G70q, G70r, G70s, G70t, G70u, G70v, G70w, G70x, G70y, G70z, G71a, G71b, G71c, G71d, G71e, G71f, G71g, G71h, G71i, G71j, G71k, G71l, G71m, G71n, G71o, G71p, G71q, G71r, G71s, G71t, G71u, G71v, G71w, G71x, G71y, G71z, G72a, G72b, G72c, G72d, G72e, G72f, G72g, G72h, G72i, G72j, G72k, G72l, G72m, G72n, G72o, G72p, G72q, G72r, G72s, G72t, G72u, G72v, G72w, G72x, G72y, G72z, G73a, G73b, G73c, G73d, G73e, G73f, G73g, G73h, G73i, G73j, G73k, G73l, G73m, G73n, G73o, G73p, G73q, G73r, G73s, G73t, G73u, G73v, G73w, G73x, G73y, G73z, G74a, G74b, G74c, G74d, G74e, G74f, G74g, G74h, G74i, G74j, G74k, G74l, G74m, G74n, G74o, G74p, G74q, G74r, G74s, G74t, G74u, G74v, G74w, G74x, G74y, G74z, G75a, G75b, G75c, G75d, G75e, G75f, G75g, G75h, G75i, G75j, G75k, G75l, G75m, G75n, G75o, G75p, G75q, G75r, G75s, G75t, G75u, G75v, G75w, G75x, G75y, G75z, G76a, G76b, G76c, G76d, G76e, G76f, G76g, G76h, G76i, G76j, G76k, G76l, G76m, G76n, G76o, G76p, G76q, G76r, G76s, G76t, G76u, G76v, G76w, G76x, G76y, G76z, G77a, G77b, G77c, G77d, G77e, G77f, G77g, G77h, G77i, G77j, G77k, G77l, G77m, G77n, G77o, G77p, G77q, G77r, G77s, G77t, G77u, G77v, G77w, G77x, G77y, G77z, G78a, G78b, G78c, G78d, G78e, G78f, G78g, G78h, G78i, G78j, G78k, G78l, G78m, G78n, G78o, G78p, G78q, G78r, G78s, G78t, G78u, G78v, G78w, G78x, G78y, G78z, G79a, G79b, G79c, G79d, G79e, G79f, G79g, G79h, G79i, G79j, G79k, G79l, G79m, G79n, G79o, G79p, G79q, G79r, G79s, G79t, G79u, G79v, G79w, G79x, G79y, G79z, G80a, G80b, G80c, G80d, G80e, G80f, G80g, G80h, G80i, G80j, G80k, G80l, G80m, G80n, G80o, G80p, G80q, G80r, G80s, G80t, G80u, G80v, G80w, G80x, G80y, G80z, G81a, G81b, G81c, G81d, G81e, G81f, G81g, G81h, G81i, G81j, G81k, G81l, G81m, G81n, G81o, G81p, G81q, G81r, G81s, G81t, G81u, G81v, G81w, G81x, G81y, G81z, G82a, G82b, G82c, G82d, G82e, G82f, G82g, G82h, G82i, G82j, G82k, G82l, G82m, G82n, G82o, G82p, G82q, G82r, G82s, G82t, G82u, G82v, G82w, G82x, G82y, G82z, G83a, G83b, G83c, G83d, G83e, G83f, G83g, G83h, G83i, G83j, G83k, G83l, G83m, G83n, G83o, G83p, G83q, G83r, G83s, G83t, G83u, G83v, G83w, G83x, G83y, G83z, G84a, G84b, G84c, G84d, G84e, G84f, G84g, G84h, G84i, G84j, G84k, G84l, G84m, G84n, G84o, G84p, G84q, G84r, G84s, G84t, G84u, G84v, G84w, G84x, G84y, G84z, G85a, G85b, G85c, G85d, G85e, G85f, G85g, G85h, G85i, G85j, G85k, G85l, G85m, G85n, G85o, G85p, G85q, G85r, G85s, G85t, G85u, G85v, G85w, G85x, G85y, G85z, G86a, G86b, G86c, G86d, G86e, G86f, G86g, G86h, G86i, G86j, G86k, G86l, G86m, G86n, G86o, G86p, G86q, G86r, G86s, G86t, G86u, G86v, G86w, G86x, G86y, G86z, G87a, G87b, G87c, G87d, G87e, G87f, G87g, G87h, G87i, G87j, G87k, G87l, G87m, G87n, G87o, G87p, G87q, G87r, G87s, G87t, G87u, G87v, G87w, G87x, G87y, G87z, G88a, G88b, G88c, G88d, G88e, G88f, G88g, G88h, G88i, G88j, G88k, G88l, G88m, G88n, G88o, G88p, G88q, G88r, G88s, G88t, G88u, G88v, G88w, G88x, G88y, G88z, G89a, G89b, G89c, G89d, G89e, G89f, G89g, G89h, G89i, G89j, G89k, G89l, G89m, G89n, G89o, G89p, G89q, G89r, G89s, G89t, G89u, G89v, G89w, G89x, G89y, G89z, G90a, G90b, G90c, G90d, G90e, G90f, G90g, G90h, G90i, G90j, G90k, G90l, G90m, G90n, G90o, G90p, G90q, G90r, G90s, G90t, G90u, G90v, G90w, G90x, G90y, G90z, G91a, G91b, G91c, G91d, G91e, G91f, G91g, G91h, G91i, G91j, G91k, G91l, G91m, G91n, G91o, G91p, G91q, G91r, G91s, G91t, G91u, G91v, G91w, G91x, G91y, G91z, G92a, G92b, G92c, G92d, G92e, G92f, G92g, G92h, G92i, G92j, G92k, G92l, G92m, G92n, G92o, G92p, G92q, G92r, G92s, G92t, G92u, G92v, G92w, G92x, G92y, G92z, G93a, G93b, G93c, G93d, G93e, G93f, G93g, G93h, G93i, G93j, G93k, G93l, G93m, G93n, G93o, G93p, G93q, G93r, G93

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6226	18032	30658	1.87	1.0E-03	AA290951.1	EST_HUMAN	z54401.1 NCI_CGAP_G081 Homo sapiens cDNA clone IMAGE:700345 5'
5317	18121	30778	3.12	1.0E-03	AJ006345.1	NT	Homo sapiens KVLQ11 gene
5369	18170	30858	1.85	1.0E-03	K03332.1	NT	Epstein-Barr virus (AG876 isolate) U2-IR2 domain encoding nuclear protein EBNA2, complete cds
5369	18170	30857	1.85	1.0E-03	K03332.1	NT	Epstein-Barr virus (AG876 isolate) U2-IR2 domain encoding nuclear protein EBNA2, complete cds
5485	18284	31182	0.83	1.0E-03	BE796491.1	EST_HUMAN	601589841F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3943954 5'
5491	18280	31187	2.07	1.0E-03	Q02388	SWISSPROT	COLLAGEN ALPHA 1(VII) CHAIN PRECURSOR (LONG-CHAIN COLLAGEN) (LC COLLAGEN)
5546	18343	31251	0.67	1.0E-03	N41974.1	EST_HUMAN	Y07008.1 Soares melanocyte ZN15HM Homo sapiens cDNA clone IMAGE:270587 5' similar to contains element MER6 repetitive element
5546	18343	31252	0.67	1.0E-03	N41974.1	EST_HUMAN	Y07008.1 Soares melanocyte ZN15HM Homo sapiens cDNA clone IMAGE:270587 5' similar to contains element MER6 repetitive element
5930	18714		2.75	1.0E-03	X07989.1	NT	Mouse nucleolin gene
5988	18750	31711	1.07	1.0E-03	BE963939.2	EST_HUMAN	601657519R1 NIH_MGC_88 Homo sapiens cDNA clone IMAGE:3875893 3'
6089	18877		8.78	1.0E-03	11528176	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1), mRNA
6242	19018	31990	1.14	1.0E-03	T87781.1	EST_HUMAN	y83411.1 Soares fetal liver spleen 1NFSL Homo sapiens cDNA clone IMAGE:115772 5'
6315	19086		1.7	1.0E-03	AW802585.1	EST_HUMAN	QV3-NN1024-280400-171-g05 NIH1024 Homo sapiens cDNA
6657	19418	32432	1.37	1.0E-03	L77570.1	NT	Homo sapiens DiGeorge syndrome critical region, centromeric end
7062	19743	32805	2.54	1.0E-03	D18828.1	NT	Human gene for fourth somatostatin receptor subtype
7639	20209	33308	1.8	1.0E-03	U52111.2	NT	Homo sapiens X28 region near ALD locus containing dual specificity phosphatase 9 (DUSP9), ribosomal protein L18a (RPL18a), Ca2+/Calmodulin-dependent protein kinase 1 (CAMK1), creatine transporter (CRTR), CDM protein (CDM), adrenoleukodystrophy protein >
7608	20274	33382	3.37	1.0E-03	M63378.1	NT	Human TRPM-2 protein gene, exons 1,2 and 3
7656	20320	33429	0.98	1.0E-03	BE880044.1	EST_HUMAN	601491081F1 NIH_MGC_89 Homo sapiens cDNA clone IMAGE:3893278 5'
7789	20484	33608	0.83	1.0E-03	AF274591.1	NT	Homo sapiens prolactin-releasing peptide receptor gene, 5' flanking region
7850	20545	33673	5.18	1.0E-03	AJ251973.1	NT	Homo sapiens partial sterth-1 gene
8043	20737	33870	1	1.0E-03	AA122270.1	EST_HUMAN	z697c09.a1 Soares_pregnant uterus_NIH-IPU Homo sapiens cDNA clone IMAGE:490768 3' similar to contains L1.1 L1 repetitive element
8142	20838	33968	1.94	1.0E-03	AF153960.1	NT	Homo sapiens excise-like protein 1 (EXTL1) gene, exons 2 through 11, and complete cds
8328	21022	34158	0.88	1.0E-03	U29397.1	NT	Rattus norvegicus plasma membrane Ca2+ ATPase isoform 3 (PMCA3) gene, 5' flanking region
8492	21184	34328	0.81	1.0E-03	AA001813.1	EST_HUMAN	zh82a06.a1 Soares_fetal_liver_spleen_1NFSL S1 Homo sapiens cDNA clone IMAGE:427810 3'
8492	21184	34327	0.81	1.0E-03	AA001813.1	EST_HUMAN	zh82a06.a1 Soares_fetal_liver_spleen_1NFSL S1 Homo sapiens cDNA clone IMAGE:427810 3'
8842	21534		1.36	1.0E-03	Y11204.1	NT	V. carlari gene encoding volvoxin
8889	21580	34705	0.62	1.0E-03	AW840363.1	EST_HUMAN	CM3-LT0079-170200-092-e07 LT0079 Homo sapiens cDNA

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8978	21068		0.58	1.0E-03	U52111.2	NT	Homo sapiens X28 region near ALD locus containing dual specificity phosphatase 9 (DUSP9), ribosomal protein L18a (RPL18a), Ca2+/Calmodulin-dependent protein kinase I (CAMKI), creatine transporter (CRTR), CDM protein (CDM), adrenoleukodystrophy protein >
9017	21707	34858	3.68	1.0E-03	M30471.1	NT	Human class III alcohol dehydrogenase (ADH5) cti subunit mRNA, complete cds
9017	21707	34859	3.68	1.0E-03	M30471.1	NT	Human class III alcohol dehydrogenase (ADH5) cti subunit mRNA, complete cds
9507	22160	35340	1.66	1.0E-03	AF011400.1	NT	Thermotoga neopolitana alpha-1,5-galactosidase (sgla) gene, complete cds
9607	22160	35341	1.66	1.0E-03	AF011400.1	NT	Thermotoga neopolitana alpha-1,5-galactosidase (sgla) gene, complete cds
9720	22371	35570	0.81	1.0E-03	Q01128	SWISSPROT	BONE PROTEOGLYCAN II PRECURSOR (PG-S2) (DECORIN) (PG40) (DERMATAN SULFATE PROTEOGLYCAN-II) (DSFG)
10063	22711	35929	0.65	1.0E-03	AF003528.1	NT	Homo sapiens glycican 3 (GPC3) gene, partial cds and flanking repeat regions
10068	22716		0.75	1.0E-03	AF097485.1	NT	Homo sapiens transducin beta-like 2 (TBL2) gene, complete cds
10214	22862	36075	1.72	1.0E-03	A1024350.1	EST_HUMAN	ov7508.x1 Soares testis NHT Homo sapiens cDNA clone IMAGE:1643175 3' similar to contains MER39.b1
10503	23149		0.46	1.0E-03	AA706202.1	EST_HUMAN	MER39 MER39 repetitive element;
10563	23259	36465	1.79	1.0E-03	AW382393.1	EST_HUMAN	eg83f12.61 Strabegone HNT neuron (8937233) Homo sapiens cDNA clone IMAGE:1142083 3' similar to contains Alu repetitive element;
10563	23259	36466	1.79	1.0E-03	AW382393.1	EST_HUMAN	RC1-CT0279-181099-011-409 CT0279 Homo sapiens cDNA
10651	23342	36580	2.78	1.0E-03	BE170858.1	EST_HUMAN	RC1-CT0279-181099-011-409 CT0279 Homo sapiens cDNA
10725	23413		3.29	1.0E-03	AI689347.1	EST_HUMAN	QV3-HT0543-220300-130-403 HT0543 Homo sapiens cDNA
10806	23491	36727	1.36	1.0E-03	AW237482.1	EST_HUMAN	it73e12.x1 NCI_CGAP_HSC3 Homo sapiens cDNA clone IMAGE:2246448 3' similar to TR:Q28195 Q28195 PVA1 GENE ;
11106	23776		3.05	1.0E-03	AV759949.1	EST_HUMAN	pm72d12.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2688751 3'
11906	24470	37806	4.48	1.0E-03	BE894488.1	EST_HUMAN	AV759949 MDS Homo sapiens cDNA clone MDSDDF11 5'
12124	24616		1.38	1.0E-03	AV731520.1	EST_HUMAN	801433087F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3918524 5'
12371	25342		1.98	1.0E-03	A1347355.1	EST_HUMAN	AV731520 HTF Homo sapiens cDNA clone HTFAJG05 5'
12478	25365	30612	7.05	1.0E-03	BE780572.1	EST_HUMAN	bc05h11.x1 NCI_CGAP_Co16 Homo sapiens cDNA clone IMAGE:2063013 3' similar to contains Alu repetitive element
12821	25187	30809	1.37	1.0E-03	AW847341.1	EST_HUMAN	801468878F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3872035 5'
5130	17848	30465	0.7	9.0E-04	P08548	SWISSPROT	RCO-CT0205-240999-021-402 CT0205 Homo sapiens cDNA
5596	18391		1.28	9.0E-04	P06727	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
6165	18942		0.6	9.0E-04	AJ005345.1	NT	APOLIPROTEIN A-IV PRECURSOR (APO-AIV)
6366	19164	32165	0.96	9.0E-04	P02381	SWISSPROT	Homo sapiens KVLOT1 gene
9543	22196		1.42	9.0E-04	AB037203.1	NT	MITOCHONDRIAL RIBOSOMAL PROTEIN VAR1
1471	14218		1.02	8.0E-04	X96469.1	NT	Glycylhistidine Gln Gln mRNA for beta-amylin synthase, complete cds
							Xlaevis mRNA for C4SR protein



Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4159	10889		4.37	8.0E-04	P08547	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
4713	17445	30078	2.39	8.0E-04	U28185.1	NT	Homo sapiens prion protein (PrP) gene, complete cds
11092	23762		2.93	8.0E-04	AA77084.1	EST_HUMAN	z24c10.s1 Soares_fetal_hear1_NBRH19W Homo sapiens cDNA clone IMAGE:377874 3'
11200	23828		1.98	8.0E-04	A1571099.1	EST_HUMAN	tr85a08.x1 NCI_OGAP_U12 Homo sapiens cDNA clone IMAGE:2176310 3'
2388	15119	27866	0.97	7.0E-04	U28185.1	NT	Homo sapiens prion protein (PrP) gene, complete cds
2719	15426	28164	1.19	7.0E-04	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
3274	18035	28685	1	7.0E-04	4885170	NT	Homo sapiens chromosome X open reading frame 8 (CXORF8) mRNA
6005	18786	31748	0.94	7.0E-04	AA516212.1	EST_HUMAN	ngd5g12.s1 NCI_OGAP_L1p2 Homo sapiens cDNA clone IMAGE:839718 similar to contains L1.b3 L1 L1
6420	19188		2.47	7.0E-04	A1708331.1	EST_HUMAN	replicative element
7128	19816		0.78	7.0E-04	AK024445.1	NT	wg3609.x1 Soares_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:2367209 3'
9703	22354	35549	0.53	7.0E-04	P13497	SWISSPROT	Homo sapiens mRNA for FLJ0035 protein, partial cds
9703	22354	35550	0.53	7.0E-04	P13497	SWISSPROT	BONE MORPHOGENETIC PROTEIN 1 PRECURSOR (BMP-1)
11557	24158		2.28	7.0E-04	U78027.1	NT	BONE MORPHOGENETIC PROTEIN 1 PRECURSOR (BMP-1)
11586	24185	37500	4.04	7.0E-04	Z40501.1	EST_HUMAN	Homo sapiens Bruton's tyrosine kinase (BTK), alpha-D-galactosidase A (GLA), L44-like ribosomal protein (L44L) and F1P3 (F1P3) genes, complete cds
12642	24939		2.31	7.0E-04	R17338.1	EST_HUMAN	HSC28A072 normalized infant brain cDNA Homo sapiens cDNA clone c-28a07 3'
12689	24984		5.98	7.0E-04	6005855	NT	yg13c06.t1 Soares Infant brain 1N1B Homo sapiens cDNA clone IMAGE:32298 5'
3041	16981	29329	1.83	6.0E-04	AI862325.1	EST_HUMAN	Homo sapiens Retina-derived POU-domain factor-1 (RPF-1), mRNA
4088	16812	29440	0.78	6.0E-04	K01315.1	NT	wj15a11.x1 NCI_OGAP_K1d12 Homo sapiens cDNA clone IMAGE:2402876 3'
4088	16812	29441	0.78	6.0E-04	K01315.1	NT	Homo sapiens epsilon-1 pseudogene (IGHEP1) gene, 5' flanking region
4182	16802	29531	3.79	6.0E-04	U45983.1	NT	Homo sapiens epsilon-1 pseudogene (IGHEP1) gene, 5' flanking region
7478	20151	33245	0.81	6.0E-04	Q15034	SWISSPROT	Homo sapiens CCR8 chemokine receptor (CMKBR8) gene, complete cds
7795	20461		3.33	6.0E-04	P49408	SWISSPROT	HYPOTHETICAL PROTEIN KIAA0032
7914	20609		0.62	6.0E-04	H92947.1	EST_HUMAN	GLUCOSE TRANSPORTER TYPE 5, SMALL INTESTINE (FRUCTOSE TRANSPORTER)
9880	22530		3.5	6.0E-04	AL049507.2	EST_HUMAN	yg04c11.s1 Soares_pituitary_gland_N3HPG Homo sapiens cDNA clone IMAGE:231956 3' similar to contains LOR1 repetitive element
9880	22628	35837	2.26	6.0E-04	BE005850.1	EST_HUMAN	DKFZp586M2024.t1 586 (synonym: hufet1) Homo sapiens cDNA clone DKFZp586M2024
10238	22886		0.71	6.0E-04	AF287478.1	NT	RC2-BN0120-250400-012-h11 BN0120 Homo sapiens cDNA
11467	24070	37378	2.53	6.0E-04	AJ228042.1	NT	Lytechinus variegatus embryonic blastocoelar extracellular matrix protein precursor (ECM3) mRNA, complete cds
11568	24157	37467	3.46	6.0E-04	AW013847.1	EST_HUMAN	Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22, segment 2/3
11636	24233		2.17	6.0E-04	Q01768	SWISSPROT	UHH-B10-esb-e-08-0.U1.s1 NCI_OGAP_Sub1 Homo sapiens cDNA clone IMAGE:2708826 3'
12082	25249		2.81	6.0E-04	AW380519.1	EST_HUMAN	NUCLEOSIDE DIPHOSPHATE KINASE B (NDK B) (NDP KINASE B) (NM23-M2) (P18)
							RC1-HT0269-281199-012-408 HT0269 Homo sapiens cDNA

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Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12816	25058		1.34	6.0E-04	AI817088.1	EST_HUMAN	wf7g11.x1 NCL CGAP_Lut19 Homo sapiens cDNA clone IMAGE:2408804 3' similar to contains element L1 repetitive element;
636	13415	26051	6.81	5.0E-04	O10341	SWISSPROT	HYPOTHETICAL 29.3 KD PROTEIN (ORF582)
1490	14237		1.4	5.0E-04	AW851844.1	EST_HUMAN	QVQ-CT0225-021099-030-007 CT0225 Homo sapiens cDNA
3408	16169	28815	1.35	5.0E-04	AA54931.1	EST_HUMAN	nk27e11.s1 NCL CGAP_Co11 Homo sapiens cDNA clone IMAGE:1014764 3' similar to contains Alu repetitive element;
3704	16457	28096	2.32	5.0E-04	Q9UKP4	SWISSPROT	ADAM-TS 7 PRECURSOR (A DISINTEGRIN AND METALLOPROTEINASE WITH THROMBOSPONDIN MOTIFS 7) (ADAMTS-7) (ADAM-TS7)
6396	18186	30877	2.99	5.0E-04	AF249054.1	NT	Bos taurus micromolar calcium activated neutral protease 1 (CAPN1) gene, exons 11-20, and partial cds
6532	19298	32303	7.89	5.0E-04	AA156080.1	EST_HUMAN	z033b08.r1 Stragene colon (8937204) Homo sapiens cDNA clone IMAGE:588663 5'
7276	19960	33037	3.75	5.0E-04	M23604.1	NT	Gorilla gorilla inducible gene medium allele, complete cds
7656	20551	33577	5.2	5.0E-04	AI198382.1	EST_HUMAN	cd13f08.x1 Soares placenta 8c0wec02a_2Nbl-IP8t0w Homo sapiens cDNA clone IMAGE:1723619 3' similar to gb:X51602.cds1 VASCULAR ENDOTHELIAL GROWTH FACTOR RECEPTOR 1 (HUMAN); contains Alu repetitive element;
8202	20906	34033	0.96	5.0E-04	AA814519.1	EST_HUMAN	cb0602.s1 NCL CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1339228 3' similar to contains element MER22 repetitive element;
9177	21847	35013	1.39	5.0E-04	AA846545.1	EST_HUMAN	ef56f03.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1394357 3'
9271	22025	35195	0.88	5.0E-04	N83765.1	EST_HUMAN	KK2745F Human fetal heart_Lambda ZAP Express Homo sapiens cDNA clone KK2745 5' similar to REPETITIVE ELEMENT
9418	22096	35208	1.44	5.0E-04	P28126	SWISSPROT	BIFUNCTIONAL ENDO-1,4-BETA-XYLANASE XYL PRECURSOR
9509	22152	35344	4.1	5.0E-04	AW270938.1	EST_HUMAN	xs0602.x1 NCL CGAP_Kd111 Homo sapiens cDNA clone IMAGE:2788858 3'
10177	22825		0.48	5.0E-04	U50871.1	NT	Human familial Alzheimer's disease (STM2) gene, complete cds
10897	23577		2.36	5.0E-04	AL048507.2	EST_HUMAN	DKFZp686M2024_r1 586 (synonym: huter) Homo sapiens cDNA clone DKFZp686M2024
11713	18186	30877	14.09	5.0E-04	AF249054.1	NT	Bos taurus micromolar calcium activated neutral protease 1 (CAPN1) gene, exons 11-20, and partial cds
12020	25184		5.04	5.0E-04	AA568513.1	EST_HUMAN	nr15h02.s1 NCL CGAP_P11 Homo sapiens cDNA clone IMAGE:913875
656	13435	26076	1.46	4.0E-04	U32748.1	NT	Haemophilus influenzae Rd section 63 of 163 of the complete genome
827	13597	26267	1.79	4.0E-04	AJ720263.1	EST_HUMAN	as70b08.x1 Barstead colon HPLRB7 Homo sapiens cDNA clone IMAGE:2334039 3' similar to TR-Q13825 Q13825 AU-BINDING PROTEINENOVYL-COO HYDRATASE ;
827	13597	26268	1.79	4.0E-04	AJ720263.1	EST_HUMAN	as70b08.x1 Barstead colon HPLRB7 Homo sapiens cDNA clone IMAGE:2334039 3' similar to TR-Q13825 Q13825 AU-BINDING PROTEINENOVYL-COO HYDRATASE ;
1449	14198	26980	3.18	4.0E-04	AW753356.1	EST_HUMAN	RC3-CT0254-130100-023-01 CT0254 Homo sapiens cDNA
2075	14807	27638	1.81	4.0E-04	AL163278.2	NT	Homo sapiens chromosome 21 segment HS21C078

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2128	14860		1	4.0E-04	AL048704.1	EST_HUMAN	DKFZp434D059.1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434D059 5'
2633	15345	28088	2.21	4.0E-04	O96015	SWISSPROT	SERPIN-2 (SILK GUM PROTEIN 2)
3162	15925	28572	0.95	4.0E-04	AF281074.1	NT	Homo sapiens neuropilin 2 (NRP2) gene, complete cds, alternatively spliced
4289	17028	28653	3.18	4.0E-04	AA578331.1	EST_HUMAN	rh10a10.s1 NCI_CGAP_Cot1 Homo sapiens cDNA clone IMAGE:951930 3' similar to gb:M21121 T-CELL SPECIFIC RANTES PROTEIN PRECURSOR (HUMAN);
4289	17028	28654	3.18	4.0E-04	AA578331.1	EST_HUMAN	rh10a10.s1 NCI_CGAP_Cot1 Homo sapiens cDNA clone IMAGE:951930 3' similar to gb:M21121 T-CELL SPECIFIC RANTES PROTEIN PRECURSOR (HUMAN);
4500	17236	28668	1.78	4.0E-04	AA086324.1	EST_HUMAN	zn61c08.s1 Stratiene muscle 937209 Homo sapiens cDNA clone IMAGE:562670 3'
5028	17748	30360	3.1	4.0E-04	BE560660.1	EST_HUMAN	601345895F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3678910 5'
7168	18855	32925	1.3	4.0E-04	P48442	SWISSPROT	EXTRACELLULAR CALCIUM-SENSING RECEPTOR PRECURSOR (CASR) (PARATHYROID CELL CALCIUM-SENSING RECEPTOR)
7434	20111		0.76	4.0E-04	AL161566.2	NT	Arabidopsis thaliana DNA chromosome 4, contig fragment No. 96
7618	20284	33394	0.58	4.0E-04	AU122079.1	EST_HUMAN	AU122079 MAMMA1 Homo sapiens cDNA clone MAMMA1001620 5'
8434	21127	34284	1.07	4.0E-04	BF240712.1	EST_HUMAN	601876865F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:4099700 5'
8442	21134	34270	1.5	4.0E-04	N25507.1	EST_HUMAN	yc39a12.11 Soares melanocyte 2N6HM Homo sapiens cDNA clone IMAGE:284142 5'
9590	22243	35428	3.24	4.0E-04	AI025699.1	EST_HUMAN	ov67n03.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1644341 3'
9740	22391		1.22	4.0E-04	AF022855.1	NT	Mus musculus neuropilin-2(a17) mRNA, alternatively spliced, complete cds
12380	25157		2.05	4.0E-04	AF254822.1	NT	Homo sapiens SMARCA4 isoform (SMARCA4) gene, complete cds, alternatively spliced
152	12967	25808	3.46	3.0E-04	AL119426.1	EST_HUMAN	DKFZp761J221.1 761 (synonym: hamy2) Homo sapiens cDNA clone DKFZp761J221 5'
190	13003	25844	2.24	3.0E-04	P49289	SWISSPROT	180 KD SECRETORY PHOSPHOLIPASE A2 RECEPTOR PRECURSOR (PLA2-R)
860	13629	26300	1.32	3.0E-04	U83891.1	NT	Human short chain acyl CoA dehydrogenase gene, exons 1 and 2
1831	14570	27282	1.08	3.0E-04	AI262100.1	EST_HUMAN	qz28d03.y1 NCI_CGAP_Kd11 Homo sapiens cDNA clone IMAGE:2028197 5'
1846	14584		1.21	3.0E-04	AI399674.1	EST_HUMAN	h23a02.x1 NCI_CGAP_P128 Homo sapiens cDNA clone IMAGE:2118082 3'
3303	16084	28712	3.43	3.0E-04	P25147	SWISSPROT	INTERNALIN B PRECURSOR
3308	16068	28717	0.7	3.0E-04	AA203342.1	EST_HUMAN	zc56a04.t1 Soares fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:448478 5'
3946	16998	29335	4.07	3.0E-04	P49448	SWISSPROT	GLUTAMATE DEHYDROGENASE 2 PRECURSOR (GDH)
4034	16779		1.33	3.0E-04	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region, segment 1/2
4072	16816		1.12	3.0E-04	BE140808.1	EST_HUMAN	RC0-HT0014-310569-028 HT0014 Homo sapiens cDNA
4766	17498		4.72	3.0E-04	BE163778.1	EST_HUMAN	PM0-HT0339-190200-007-g12 HT0339 Homo sapiens cDNA
4827	17558	30180	0.95	3.0E-04	AW937723.1	EST_HUMAN	QV3-DT0045-221289-046-D09 DT0045 Homo sapiens cDNA
5063	17782	30399	0.98	3.0E-04	AA613145.1	EST_HUMAN	mq08g09.s1 NCI_CGAP_Lur1 Homo sapiens cDNA clone IMAGE:1143328 3'
8062	18832		7.86	3.0E-04	AL163281.2	NT	Homo sapiens chromosome 21 segment HS21C081
6722	18556	32586	2.62	3.0E-04	AL163278.2	NT	Homo sapiens chromosome 21 segment HS21C078
7491	20163	33258	0.84	3.0E-04	P23468	SWISSPROT	PROTEIN-TYROSINE PHOSPHATASE DELTA PRECURSOR (R-PTP-DELTA)

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8157	20851	33983	3.23	3.0E-04	P22807	SWISSPROT	FIBROBLAST GROWTH FACTOR RECEPTOR 3 PRECURSOR (FGFR-3)
9820	22471	35673	1.34	3.0E-04	AA454055.1	EST_HUMAN	zx48d08.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:795471 5' similar to gb:M62762
10078	22726	35943	0.65	3.0E-04	A1892139.1	EST_HUMAN	VACUOLAR ATP SYNTHASE 16 KD PROTEOLIPID SUBUNIT (HUMAN);
10356	23003	38220	3.73	3.0E-04	AA781201.1	EST_HUMAN	wf75a11.x1 Soares_thymus_NHT Homo sapiens cDNA clone IMAGE:2513276 3'
10495	23141	36367	0.54	3.0E-04	P13816	SWISSPROT	s424g05.s1 Soares_testis_NHT Homo sapiens cDNA clone 1391288 3' similar to gb:M36072 60S
11555	24154	37406	1.38	3.0E-04	4501980	NT	RIBOSOMAL PROTEIN L7A (HUMAN);
11978	25396	30817	4.81	3.0E-04	AA228301.1	EST_HUMAN	GLUTAMIC ACID-RICH PROTEIN PRECURSOR
12338	25230	30818	3.08	3.0E-04	AB018282.1	NT	Homo sapiens adrenergic, alpha-1A, receptor (ADRA1A), mRNA
12730	25000		2.75	3.0E-04	AL134483.1	EST_HUMAN	nc38a04.l1 NCI_CGAP_P22 Homo sapiens cDNA clone IMAGE:1010430 similar to contains L1.12 L1
171	12984	25824	2.65	2.0E-04	AF217786.1	NT	repetitive element;
466	13251	26892	1.8	2.0E-04	AU146707.1	EST_HUMAN	Homo sapiens mRNA for KIAA0749 protein, partial cds
887	13656	26324	10.71	2.0E-04	M86524.1	NT	DKFZp547L185_r1 547 (synonym: hibr1) Homo sapiens cDNA clone DKFZp547L185 5'
887	13656	26325	10.71	2.0E-04	M86524.1	NT	Homo sapiens SCG10 like-protein, helicase-like protein NHL, M68, and ADP-ribosylation factor related protein 1 (ARFRP1) genes, complete cds
1156	13911		3.93	2.0E-04	AD289021.1	EST_HUMAN	AU146707 HEMBB1 Homo sapiens cDNA clone HEMBB1001253 3'
1163	13917		2.18	2.0E-04	AL163203.2	NT	Human dystrophin gene
1824	14503		1.12	2.0E-04	AF224268.1	NT	Human dystrophin gene
							qh08a11.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1855052 3' similar to contains
							MER3 b2 MER3 repetitive element;
							Homo sapiens chromosome 21 segment HS21C003
							Mus musculus 5' flanking region of Pib3 gene
							Human germ-line T-cell receptor beta chain TCRBV17S1A1T, TCRBV2S1, TCRBV10S1P, TCRBV28S1P,
2581	15295	28033	4.47	2.0E-04	U660061.1	NT	TCRBV19S1P, TCRBV19S1, TCRBV11S1A1T, HVB relic, TCRBV28S1P, TCRBV34S1, TCRBV14S1,
2986	15762	28398	1.11	2.0E-04	A1124529.1	EST_HUMAN	TCRBV3S1, TCRBV4S1A1T, TRY4, TRY5, TRY6, TRY7, TRY8, TCRBD1, TCRBU1S1, TCRBU1S2>
3328	16088	28740	1.1	2.0E-04	5174736	NT	sm58e09.x1 Johnston frontal cortex Homo sapiens cDNA clone IMAGE:1539780 3'
3429	16186	28834	1.99	2.0E-04	BE082317.1	EST_HUMAN	Homo sapiens tubulin, beta, 4 (TUBB4) mRNA
3892	16842	29282	0.79	2.0E-04	AW078441.1	EST_HUMAN	QV2-BT0638-070500-194-607 BT0638 Homo sapiens cDNA
4122	16994		4.93	2.0E-04	U01028.1	NT	EST380550 IMAGE resequences, MAGP Homo sapiens cDNA
4620	17355	29690	1.74	2.0E-04	H86285.1	EST_HUMAN	Phaseolus vulgaris nitrate reductase (PNR2) gene, complete cds
4620	17355	29691	1.74	2.0E-04	H86285.1	EST_HUMAN	yu01e11.r1 Soares_pineal_gland_N3HPG Homo sapiens cDNA clone IMAGE:232556 5'
4742	17474		1.63	2.0E-04	U09226.1	NT	yu01e11.r1 Soares_pineal_gland_N3HPG Homo sapiens cDNA clone IMAGE:232556 5'
4998	17721	30324	1.1	2.0E-04	AB037997.1	NT	Gallus gallus proteasome 28 kDa subunit homolog mRNA, complete cds
							Danio rerio heparano gene, exons 1 to 6, partial cds

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5089	17808	30424	1.04	2.0E-04	P35748	SWISSPROT	MYOSIN HEAVY CHAIN, SMOOTH MUSCLE ISOFORM (SMMHC)
5457	18268	31149	0.73	2.0E-04	AV654352.1	EST_HUMAN	AV654352 GLC Homo sapiens cDNA clone GLCUDH10.3'
5498	18268	31180	1.75	2.0E-04	A1600862.1	EST_HUMAN	lq3b11.x1 NCI_CGAP_U3 Homo sapiens cDNA clone IMAGE:2207709.3'
6664	18469	31373	0.98	2.0E-04	AA298652.1	EST_HUMAN	EST11191 Uterus Homo sapiens cDNA 5' and similar to EST containing O family repeat
5957	18844	31594	0.81	2.0E-04	4788179	NT	Homo sapiens cell cycle progression 3 protein (DNL3) mRNA
6144	18922	31892	0.59	2.0E-04	AF140708.1	NT	Mus musculus G protein coupled receptor gene, complete cds; and unknown gene
7130	19818		2.6	2.0E-04	AU121712.1	EST_HUMAN	AU121712 MAMMA1 Homo sapiens cDNA clone MAMMA1000788.5'
7225	19910		0.56	2.0E-04	AW800603.1	EST_HUMAN	QVQ-CT0387-180300-167-e10 CT0387 Homo sapiens cDNA
7520	20191		14.88	2.0E-04	P08548	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
7530	20200	33296	1.42	2.0E-04	P54286	SWISSPROT	MYOMESIN 2 (M-PROTEIN) (165 KD TITIN-ASSOCIATED PROTEIN) (165 KD CONNECTIN-ASSOCIATED PROTEIN)
7855	20550	33675	1.08	2.0E-04	U32444.2	NT	Solanum lycopersicum phytochrome F (PHYF) gene, partial cds
7855	20550	33676	1.08	2.0E-04	U32444.2	NT	Solanum lycopersicum phytochrome F (PHYF) gene, partial cds
8182	20876	34012	1.23	2.0E-04	AB028898.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
8182	20876	34013	1.23	2.0E-04	AB028898.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
8463	21155	34288	1.96	2.0E-04	AF020503.1	NT	Homo sapiens FRA3B common fragile region, diadenosine triphosphate hydrolase (FHIT) gene, exon 5
8842	21334	34478	0.49	2.0E-04	X57331.1	NT	Human immunoglobulin C(mu) and C(delta) heavy chain genes (constant regions)
8233	21912	35086	0.49	2.0E-04	AA725700.1	EST_HUMAN	ai22a12.s1 Soares testis_NHT Homo sapiens cDNA clone 1343518.3'
9319	21966	35158	0.6	2.0E-04	P18716	SWISSPROT	GASTRULA ZINC FINGER PROTEIN XLGZF28.1
9875	22526	35719	1.19	2.0E-04	BE146903.1	EST_HUMAN	RC3-HT0254-161098-011-506 HT0254 Homo sapiens cDNA
9916	22585	35761	1.77	2.0E-04	AA405777.1	EST_HUMAN	zu66c11.1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:742964.5'
10755	23440	36084	5.23	2.0E-04	AV730373.1	EST_HUMAN	AV730373 HTF Homo sapiens cDNA clone HTFAA01.5'
11128	23798		1.61	2.0E-04	AJ243213.1	NT	Homo sapiens partial 6-HT4 receptor gene, exons 2 to 5
11276	23937	37229	3.06	2.0E-04	A1440282.1	EST_HUMAN	lq11f11.x1 NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2140289.3' similar to contains Alu repetitive element
11403	24052	37356	2.86	2.0E-04	AW138740.1	EST_HUMAN	UI-H-B11-adim-o-04-0-J1.s1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2717190.3'
11857	24441	37782	2.77	2.0E-04	A1821304.1	EST_HUMAN	yb79b10.x5 Stragene ovary (937217) Homo sapiens cDNA clone IMAGE:77371.3'
1053	13812	26472	3.3	1.0E-04	P11369	SWISSPROT	RETROVIRUS-RELATED POL POLYPROTEIN [CONTAINS: REVERSE TRANSCRIPTASE; ENDONUCLEASE]
1092	13850	26608	4.74	1.0E-04	AW013847.1	EST_HUMAN	UI-H-B10-aab-e-09-0-J1.s1 NCI_CGAP_Sub1 Homo sapiens cDNA clone IMAGE:2708825.3'
1092	13850	26609	4.74	1.0E-04	AW013847.1	EST_HUMAN	UI-H-B10-aab-e-09-0-J1.s1 NCI_CGAP_Sub1 Homo sapiens cDNA clone IMAGE:2708825.3'

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1309	14057		3.12	1.0E-04	U62018.1	NT	Anguilla anguilla dopamine D1A1 receptor (d1A1) gene, complete cds
1623	14370	27058	3.25	1.0E-04	AF148805.1	NT	Kaposi's sarcoma-associated herpesvirus ORF 68 gene, partial cds; and ORF 69, kaposin, v-FLIP, v-cyclin, latent nuclear antigen, ORF K14, v-GPCR, putative phosphoribosylformylglycanamide synthase, and LAMP (LAMP) genes, complete cds
1623	14370	27059	3.25	1.0E-04	AF148805.1	NT	Kaposi's sarcoma-associated herpesvirus ORF 68 gene, partial cds; and ORF 69, kaposin, v-FLIP, v-cyclin, latent nuclear antigen, ORF K14, v-GPCR, putative phosphoribosylformylglycanamide synthase, and LAMP (LAMP) genes, complete cds
1854	14592	27308	2.09	1.0E-04	AB048342.1	NT	Equus caballus DNA, chromosome 24q14, microsatellite TKY36
3278	16039	28689	1.06	1.0E-04	Q82203	SWISSPROT	SPLICEOSOME ASSOCIATED PROTEIN 62 (SAP 62) (SPLICING FACTOR 3A SUBUNIT 2) (SF3A66)
3719	16472	29110	0.91	1.0E-04	AI440282.1	EST_HUMAN	#01f11.x1 NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2140269 3' similar to contains Alu repetitive element
4037	16782	29412	2.11	1.0E-04	NI14042.1	NT	Mouse alpha 1 type-IV collagen mRNA
4062	16807	29437	1.15	1.0E-04	AV647727.1	EST_HUMAN	AV647727 GLC Homo sapiens cDNA clone GLC8BD04 3'
5036	17755	30368	1.28	1.0E-04	7662015	NT	Homo sapiens KIAA0237 gene product (KIAA0237), mRNA
5036	17755	30369	1.28	1.0E-04	7662015	NT	Homo sapiens KIAA0237 gene product (KIAA0237), mRNA
5769	18560	31487	1.49	1.0E-04	P08547	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
5834	18623	31558	0.57	1.0E-04	T19015.1	EST_HUMAN	763F Heart Homo sapiens cDNA clone 763
5834	18623	31557	0.57	1.0E-04	T19015.1	EST_HUMAN	763F Heart Homo sapiens cDNA clone 763
6346	19116	32105	0.93	1.0E-04	AA177111.1	EST_HUMAN	nc02612.s1 NCI_CGAP_P33 Homo sapiens cDNA clone IMAGE:282
6738	19572	32605	0.92	1.0E-04	AA564581.1	EST_HUMAN	ij25a04.s1 NCI_CGAP_AA1 Homo sapiens cDNA clone IMAGE:993486 3' similar to gb:M97252
7086	19776	32841	15.0	1.0E-04	AI251980.1	EST_HUMAN	KALLMANN SYNDROME PROTEIN PRECURSOR (HUMAN); contains Alu repetitive element
7470	19776	32841	17.82	1.0E-04	AI251980.1	EST_HUMAN	qv57d10.x1 NCI_CGAP_Ov32 Homo sapiens cDNA clone IMAGE:1985683 3'
7894	20589	33719	0.95	1.0E-04	AA630463.1	EST_HUMAN	qv57d10.x1 NCI_CGAP_Ov32 Homo sapiens cDNA clone IMAGE:1985683 3'
9236	21915	35088	2.27	1.0E-04	AI806220.1	EST_HUMAN	ab04g08.s1 Stratiotes lung (#637210) Homo sapiens cDNA clone IMAGE:854654 3'
9247	21926	35087	1.46	1.0E-04	O88989	SWISSPROT	wf26a08.x1 Scores_NFL_T_QBC_S1 Homo sapiens cDNA clone IMAGE:2356742 3'
9325	21992		0.49	1.0E-04	T77153.1	EST_HUMAN	CYSTATIN-RELATED EPIDIDYMAL SPERMATOGENIC PROTEIN PRECURSOR (CYSTATIN 8)
9546	22189	35381	1.86	1.0E-04	10963876	NT	y472c08.r1 Scores fetal liver spleen 1NLS Homo sapiens cDNA clone IMAGE:113774 6'
10079	22727		2.74	1.0E-04	P08547	SWISSPROT	Homo sapiens phospholipid scramblase 1 (PLSCR1), mRNA
10115	22763	35975	1	1.0E-04	P08548	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
11312	23971		2.13	1.0E-04	M28587.1	NT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
11567	24166	37479	2.05	1.0E-04	AW205336.1	EST_HUMAN	Mouse alpha leukocyte interferon gene, complete cds
11567	24166	37480	2.05	1.0E-04	AW205336.1	EST_HUMAN	UI-H-B11-sew-a-02-0-UI.s1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2720546 3'
11849	24248	37588	1.76	1.0E-04	AB032698.1	NT	UI-H-B11-sew-a-02-0-UI.s1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2720546 3'
							Homo sapiens mRNA for KIAA1142 protein, partial cds

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11692	24287	37609	2.01	1.0E-04	AW269061.1	EST_HUMAN	xx49g12.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2816518 3'
11725	24319	37643	2	1.0E-04	Q03956	SWISSPROT	NEURONAL-GLIAL CELL ADHESION MOLECULE PRECURSOR (NG-CAM)
11725	24319	37644	2	1.0E-04	Q03958	SWISSPROT	NEURONAL-GLIAL CELL ADHESION MOLECULE PRECURSOR (NG-CAM)
12131	25203		2.51	1.0E-04	BE576398.1	EST_HUMAN	729a10.x1 NCI_CGAP_CLL1 Homo sapiens cDNA clone IMAGE:3298058 3' similar to contains L1.13 L1 repetitive element;
682	13457	28102	2.78	9.0E-05	AA718933.1	EST_HUMAN	af45c11.a1 Soares_testis_NHT Homo sapiens cDNA clone 1282468 3'
1997	14733	27465	1.14	9.0E-05	AW888218.1	EST_HUMAN	QV4-SN0023-070400-166-504 SN0023 Homo sapiens cDNA
5973	18660	31601	1.81	9.0E-05	Q60716	SWISSPROT	PROLYL 4-HYDROXYLASE ALPHA-2 SUBUNIT PRECURSOR
7476	20149	33242	0.6	9.0E-05	AW204958.1	EST_HUMAN	UHH-B11-ear-d-05-0-U1.a1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2720289 3'
7476	20149	33243	0.6	9.0E-05	AW204958.1	EST_HUMAN	UHH-B11-ear-d-05-0-U1.a1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2720289 3'
9378	21951		3.02	9.0E-05	D85606.1	NT	Homo sapiens gene for cholesterylkin type-A receptor, complete cds
9378	21953	35125	2.78	9.0E-05	AF120982.1	NT	Homo sapiens methyl-CpG binding protein 1 (MBD1) gene, exon 15b
11082	23752	37027	2.88	9.0E-05	AW079078.1	EST_HUMAN	xa34g05.x1 NCI_CGAP_Br18 Homo sapiens cDNA clone IMAGE:2568728 3' similar to contains L1.12 L1 repetitive element;
11207	23870	37156	1.76	9.0E-05	A1287878.1	EST_HUMAN	q23f08.x1 NCI_CGAP_Lym6 Homo sapiens cDNA clone IMAGE:1982435 3' similar to contains element MIR repetitive element;
11617	18660	31601	3.5	9.0E-05	Q60716	SWISSPROT	PROLYL 4-HYDROXYLASE ALPHA-2 SUBUNIT PRECURSOR
12178	25259		6.03	9.0E-05	AF129758.1	NT	Homo sapiens MSH65 gene, partial cds; and CLIC1, DDAH, G6b, G6c, G6d, G6e, G6f, BAT5, G6b, GSK2B, BAT4, G4, Apo M, BAT3, BAT2, AIF-1, 1C7, LST-1, LTB, TNF, and LTA genes, complete cds
802	13574	26237	1.97	8.0E-05	AJ251648.1	NT	Plasmodium falciparum mRNA for beta-1,3 glucanase (gnc2 gene)
844	13614		2.75	8.0E-05	AJ251648.1	NT	Plasmodium falciparum mRNA for beta-1,3 glucanase (gnc2 gene)
2960	16716		0.73	8.0E-05	M89575.1	NT	Human platelet-derived growth factor A chain (PDGFA) gene, exons only
4448	17184	28608	0.87	8.0E-05	AW044603.1	EST_HUMAN	wy78a04.x1 Soares_NSF_F8_9W_OT_PA_P_ST Homo sapiens cDNA clone IMAGE:2554638 3'
11099	23789	37045	1.84	8.0E-05	M89197.1	NT	Human heptoglobin and heptoglobin-related protein (HP and HPR) genes, complete cds
12765	25242		4.06	8.0E-05	AA278333.1	EST_HUMAN	z88h01.a1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:704583 3' similar to contains Alu repetitive element; contains element MSR1 repetitive element;
337	13138	25773	1.14	7.0E-05	AW847445.1	EST_HUMAN	RC3-CTD208-220999-011-E04 CTD208 Homo sapiens cDNA
337	13138	25774	1.14	7.0E-05	AW847445.1	EST_HUMAN	RC3-CTD208-220999-011-E04 CTD208 Homo sapiens cDNA
554	13337	25965	1.1	7.0E-05	L46075.1	EST_HUMAN	HUM072014F Human fovea cDNA Homo sapiens cDNA clone EST HFD072014
554	13337	25966	1.1	7.0E-05	L46075.1	EST_HUMAN	HUM072014F Human fovea cDNA Homo sapiens cDNA clone EST HFD072014
1053	13793	26453	1.4	7.0E-05	Q22949	SWISSPROT	PROBABLE GLYCEROL-3-PHOSPHATE ACYLTRANSFERASE, MITOCHONDRIAL PRECURSOR (GPAT)
2724	15431	28168	2.99	7.0E-05	AL163278.2	NT	Homo sapiens chromosome 21 segment HS21C078

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3156	15919	28565	5.72	7.0E-05	AB008080.1	NT	Dictyostelium discoideum gene for TRFA, complete cds
4339	17078	29707	1.71	7.0E-05	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
4412	17149	29776	0.95	7.0E-05	U60980.1	NT	Caenorhabditis elegans Skp1p homolog mRNA, complete cds
4871	17598	30221	0.71	7.0E-05	8845300	EST	Rat cytomegalovirus Mestrich1, complete genome
8124	20818	33954	1.09	7.0E-05	AA505582.1	EST_HUMAN	h83g01.s1 NCI_CGAP_Br2 Homo sapiens cDNA clone IMAGE:966098 3'
9453	22003	35175	2.97	7.0E-05	T07095.1	EST_HUMAN	EST04984 Fetal brain, Stratiogene (cat3936206) Homo sapiens cDNA clone HFBED60
11112	23782		3.09	7.0E-05	10835048	NT	Homo sapiens sarcoglycan, epsilon (SGOE), mRNA
2020	14755	27484	1.69	6.0E-05	4885170	NT	Homo sapiens chromosome X open reading frame 6 (CXORF6) mRNA
2020	14755	27485	1.69	6.0E-05	4885170	NT	Homo sapiens chromosome X open reading frame 6 (CXORF6) mRNA
2595	15309	28046	1.19	6.0E-05	AB855241.1	EST_HUMAN	w654h06.x1 NCI_CGAP_GC8 Homo sapiens cDNA clone IMAGE:2309631 3' similar to gb.J03250 DNA TOPOISOMERASE I (HUMAN);
2690	15369	28137	1.1	6.0E-05	Z84506.1	NT	H. sapiens flow-sorted chromosome 6 HindIII fragment, SC8pA28B10
2690	15369	28138	1.1	6.0E-05	Z84506.1	NT	H. sapiens flow-sorted chromosome 6 HindIII fragment, SC8pA28B10
2817	13440	28080	3.07	6.0E-05	AF030690.1	NT	Homo sapiens monocyte/neutrophil elastase inhibitor gene, complete cds
5822	18611	31541	3.61	6.0E-05	Q12860	SWISSPROT	CONTACTIN PRECURSOR (GLYCOPROTEIN GP135)
5822	18611	31542	3.61	6.0E-05	Q12860	SWISSPROT	CONTACTIN PRECURSOR (GLYCOPROTEIN GP135)
6309	19081	32066	1.4	6.0E-05	N72829.1	EST_HUMAN	y60g11.1 Soares fetal liver spleen 1NFS Homo sapiens cDNA clone IMAGE:246212 5'
6834	19498	32520	0.95	6.0E-05	AA897680.1	EST_HUMAN	q80a03.s1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1504588 3'
7983	20678	33903	0.76	6.0E-05	BE064410.1	EST_HUMAN	RC4-BT0311-141199-011-h06 BT0311 Homo sapiens cDNA
7983	20678	33904	0.76	6.0E-05	BE064410.1	EST_HUMAN	RC4-BT0311-141199-011-h06 BT0311 Homo sapiens cDNA
8342	21035	34172	0.62	6.0E-05	AA150482.1	EST_HUMAN	z08c08.s1 Soares_pregnant_uterus_Nb4PU Homo sapiens cDNA clone IMAGE:491728 3' similar to contains element MER28 repetitive element;
8347	21040	34177	2.22	6.0E-05	AW896829.1	EST_HUMAN	PM4-NN0050-310300-001-f10 NN0050 Homo sapiens cDNA
8479	21171	34316	0.63	6.0E-05	Q60401	SWISSPROT	COMPLEMENT DEACY-ACCELERATING FACTOR PRECURSOR
9151	21882	35050	1.21	6.0E-05	P08907	SWISSPROT	C4B-BINDING PROTEIN PRECURSOR (C4BP)
9151	21882	35051	1.21	6.0E-05	P08907	SWISSPROT	C4B-BINDING PROTEIN PRECURSOR (C4BP)
9421	22099	35271	0.85	6.0E-05	T94149.1	EST_HUMAN	y628c12.1 Stratiogene lung (8637210) Homo sapiens cDNA clone IMAGE:119082 5'
9621	22274	35462	0.59	6.0E-05	AW627985.1	EST_HUMAN	h37a03.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:297444 3'
10649	23340	36579	3.06	6.0E-05	R75639.1	EST_HUMAN	y56d08.s1 Soares_placenta_Nb2IP Homo sapiens cDNA clone IMAGE:149535 3' similar to contains Alu repetitive element; contains LTR7 repetitive element;
11502	24103	37415	3.36	6.0E-05	AA044015.1	EST_HUMAN	zk58f02.1 Soares_pregnant_uterus_Nb4PU Homo sapiens cDNA clone IMAGE:487035 5'
12387	25239	30822	14.34	6.0E-05	AW890110.1	EST_HUMAN	MR0-NT00038-250400-001-f09 NT0038 Homo sapiens cDNA
12810	25053		1.4	6.0E-05	BE889403.1	EST_HUMAN	7g28a08.x1 NCI_CGAP_Brn23 Homo sapiens cDNA clone IMAGE:3307768 3'
1382	14129	26802	10.46	5.0E-05	AW392086.1	EST_HUMAN	QV4-ST0234-241199-040-h11 ST0234 Homo sapiens cDNA



Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1855	14583		1.2	5.0E-05	8923891	NT	Homo sapiens 22kDa paradoxical membrane protein-like (LOC558865), mRNA
2551	15286	28001	1.1	5.0E-05	P23249	SWISSPROT	PROTEIN MOV-10
3061	16710	28350	2.41	5.0E-06	AJ251884.1	NT	Homo sapiens partial SLC22A3 gene for extraneuronal monoamine transporter (EMT), exon 1
5074	17793	30408	0.72	5.0E-05	Q28422	SWISSPROT	LIMULUS CLOTTING FACTOR C PRECURSOR (FC)
5074	17793	30409	0.72	5.0E-05	Q28422	SWISSPROT	LIMULUS CLOTTING FACTOR C PRECURSOR (FC)
5438	18237	30651	13.38	5.0E-05	X58856.1	NT	Human MLC1emb gene for embryonic myosin alkaline light chain, 3'UTR
5903	18688	31638	3.75	5.0E-05	AV683544.1	EST_HUMAN	AV683544 GLC Homo sapiens cDNA clone GLCDMA06 3'
6076	18855	31822	0.99	5.0E-05	AF280225.1	NT	Homo sapiens TESTIN 2 and TESTIN 3 genes, complete cds, alternatively spliced
7231	19016		0.87	5.0E-05	AB037084.1	NT	Mus musculus gene for calretinin, exon 1
12176	24810		3.64	5.0E-05	P49193	SWISSPROT	RETINAL-BINDING PROTEIN (RALBP)
12440	24810		4.72	5.0E-05	P49193	SWISSPROT	RETINAL-BINDING PROTEIN (RALBP)
2810	13032		3.84	4.0E-05	U12821.1	NT	Human renin (REN) gene, 5' flanking region
4449	17185	29809	0.73	4.0E-05	P49193	SWISSPROT	RETINAL-BINDING PROTEIN (RALBP)
4449	17185	29810	0.73	4.0E-05	P49193	SWISSPROT	RETINAL-BINDING PROTEIN (RALBP)
4820	17551		1.18	4.0E-05	AF164488.1	NT	Cryptosporidium parvum isolate Zaire 15 kDa glycoprotein gp15 gene, partial cds
4955	17681	30289	0.75	4.0E-05	AF212313.1	NT	Drosophila melanogaster senseless protein (sena) gene, complete cds
6841	19503	32528	0.74	4.0E-05	U01947.1	NT	Macaca mulatta haptoglobin (HP) gene, 5' region
8423	22101		7.57	4.0E-05	AF202835.1	NT	Homo sapiens PP1200 mRNA, complete cds
9801	22550	35745	0.47	4.0E-05	P11369	SWISSPROT	RETROVIRUS-RELATED POLYPROTEIN [CONTAINS: REVERSE TRANSCRIPTASE ; ENDONUCLEASE]
10306	22953	36168	0.59	4.0E-05	P23780	SWISSPROT	BETA-GALACTOSIDASE PRECURSOR (LACTASE) (ACID BETA-GALACTOSIDASE)
10688	23359	36599	4.18	4.0E-06	AW627946.1	EST_HUMAN	h36607.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2806192 3'
12140	24029		1.48	4.0E-05	AW117580.1	EST_HUMAN	element MIR repetitive element ; x193409.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2806192 3'
12789	25041		1.71	4.0E-05	AA417768.1	EST_HUMAN	z01e11.at NCI CGAP CG81 Homo sapiens cDNA clone IMAGE:746252 3'
665	13441	28082	1.6	3.0E-05	A1248061.1	EST_HUMAN	q164c10.x1 Soares_fetal_liver_spleen_NFL_S1 Homo sapiens cDNA clone IMAGE:1849458 3' similar to contains Alu repetitive element; contains element KER repetitive element ;
1037	13797	28457	0.86	3.0E-05	AW273851.1	EST_HUMAN	x24g03.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2814100 3'
1109	13868	28523	1.01	3.0E-05	BF037888.1	EST_HUMAN	601461463F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3865142 5'
1109	13868	28524	1.01	3.0E-05	BF037888.1	EST_HUMAN	601461463F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3865142 5'
3287	16048		0.73	3.0E-05	A1288019.1	EST_HUMAN	q101g11.x1 Soares_NHMPu_S1 Homo sapiens cDNA clone IMAGE:1879748 3' similar to TR:008632
4349	17088	28719	7.98	3.0E-05	BE169211.1	EST_HUMAN	Q08632 GLYCINE TYROSINE-RICH HAIR PROTEIN ;
4349	17088	28720	7.98	3.0E-05	BE169211.1	EST_HUMAN	PM1-HT0521-120200-001-e10 HT0521 Homo sapiens cDNA PM1-HT0521-120200-001-e10 HT0521 Homo sapiens cDNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4434	17170	29798	0.94	3.0E-05	AA368679.1	EST_HUMAN	EST178896 Placenta   Homo sapiens cDNA similar to similar to p53-associated protein
4434	17170	29799	0.94	3.0E-05	AA368679.1	EST_HUMAN	EST178896 Placenta   Homo sapiens cDNA similar to similar to p53-associated protein
4550	17285		0.99	3.0E-05	AL186302.2	NT	Homo sapiens chromosome 21 segment HS21G102
4686	17420	30055	1	3.0E-05	P97488	SWISSPROT	CHEMOKINE RECEPTOR-LIKE 1 (G-PROTEIN COUPLED RECEPTOR DEZ)
4785	13441	28082	0.82	3.0E-05	AI248061.1	EST_HUMAN	q94c10.x1 Soares_fetal_liver_spleen_1NFSL_S1 Homo sapiens cDNA clone IMAGE:1849456 3' similar to contains Alu repetitive element; contains element KER repetitive element ;
4791	17622	30144	0.97	3.0E-05	AU125721.1	EST_HUMAN	AU125721 NT2RM4 Homo sapiens cDNA clone NT2RM4002075 5'
5470	18269	31161	1.06	3.0E-05	11072102	NT	Mus musculus myosin light chain 2, precursor lymphocyte-specific (Mylc2pl), mRNA
6659	19419	32433	1.17	3.0E-05	AJ225782.1	NT	Homo sapiens SYBL1 gene, exons 6-8
6659	19419	32434	1.17	3.0E-05	AJ225782.1	NT	Homo sapiens SYBL1 gene, exons 6-8
7769	20494	33616	2.33	3.0E-05	BE733187.1	EST_HUMAN	601567451F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3842292 5'
8250	20944	34082	1.47	3.0E-05	AA284049.1	EST_HUMAN	zs60005.s1 Stralagene schizo brain S11 Homo sapiens cDNA clone IMAGE:701841 3'
8791	21483	34630	1.58	3.0E-05	AW770982.1	EST_HUMAN	h94e08.x1 NCI CGAP Lu24 Homo sapiens cDNA clone IMAGE:3009938 3'
8795	21487	34633	1.23	3.0E-05	6912431	NT	Homo sapiens Interleukin-1 receptor antagonist homolog 1 (IL1THY1), mRNA
8799	21491	34638	0.51	3.0E-05	P43361	SWISSPROT	MELANOMA-ASSOCIATED ANTIGEN 8 (MAGE-8 ANTIGEN)
9029	21719		0.56	3.0E-05	X03273.1	NT	Human Alu-family cluster 5' of alpha(1)-acid glycoprotein gene
9220	21899	35088	1.22	3.0E-05	AA372562.1	EST_HUMAN	EST84475 Cdon adenocarcinoma IV Homo sapiens cDNA 5' and
9563	22216		2.92	3.0E-05	A1768331.1	EST_HUMAN	wg3609.x1 Soares_NSF_F8_9W_OT_PA_P S1 Homo sapiens cDNA clone IMAGE:2367209 3'
10433	23079	36303	0.96	3.0E-05	Q62918	SWISSPROT	PROTEIN KINASE C-BINDING PROTEIN NELL2 PRECURSOR (NELL-LIKE PROTEIN 2)
10433	23079	36304	0.96	3.0E-05	Q62918	SWISSPROT	PROTEIN KINASE C-BINDING PROTEIN NELL2 PRECURSOR (NELL-LIKE PROTEIN 2)
12072	24585		1.77	3.0E-05	L77570.1	NT	Homo sapiens DiGeorge syndrome critical region, centromeric end
2323	15048	27784	1.09	2.0E-05	AI286021.1	EST_HUMAN	q98e11.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1855052 3' similar to contains
2587	15301	28037	2.43	2.0E-05	M13782.1	NT	MER3.b2 MER3 repetitive element ;
						NT	Human adenocarcinoma clear cell (ADA) gene, complete cds
2718	15425		7.45	2.0E-05	AA160592.1	EST_HUMAN	zq48a12.r1 Stralagene hNT neuron (#837233) Homo sapiens cDNA clone IMAGE:632734 5' similar to
3134	15899	28544	1.23	2.0E-05	BE060336.1	EST_HUMAN	contains Alu repetitive element; contains element L1 repetitive element ;
3343	16102	28764	0.93	2.0E-05	AF184614.1	NT	RC3-BT0319-120200-014-108 BT0319 Homo sapiens cDNA
3362	16121	28779	1.22	2.0E-05	X86211.1	NT	Homo sapiens p47-phox (NCF-1) gene, complete cds
3485	16242		0.71	2.0E-05	X86465.1	NT	H. sapiens DNA for endogenous retroviral like element
3787	16539		0.78	2.0E-05	AL039107.1	EST_HUMAN	S. cerevisiae 12.8 Kbp fragment of the left arm of chromosome XV
4843	17377		1.09	2.0E-05	BE378471.1	EST_HUMAN	DKFZp5661064.r1 598 (synonym: lfricd2) Homo sapiens cDNA clone DKFZp5661064 5'
5872	18487	31382	1.92	2.0E-05	AJ011712.1	NT	601238455F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3608653 5'
						NT	Homo sapiens TNNT1 gene, exons 1-11 (and joined CDS)

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5827	18016		0.89	2.0E-05	AF028308.1	NT	Homo sapiens chromosome 9 duplication of the T cell receptor beta locus and tyrosinogen gene families
5880	18686	31608	0.76	2.0E-05	Q13183	SWISSPROT	RENAL SODIUM/DICARBOXYLATE COTRANSPORTER (NA <sup>+</sup> /DICARBOXYLATE COTRANSPORTER)
5880	18686	31607	0.76	2.0E-05	Q13183	SWISSPROT	RENAL SODIUM/DICARBOXYLATE COTRANSPORTER (NA <sup>+</sup> /DICARBOXYLATE COTRANSPORTER)
6065	18644	31808	0.61	2.0E-05	A1149272.1	EST_HUMAN	qg72a02.x1 Soares placenta_8to9weeks_2NtHP8to9W Homo sapiens cDNA clone IMAGE:1715114.3'
6527	19293	32297	2.26	2.0E-05	AA714330.1	EST_HUMAN	similar to contains L1.13 L1 repetitive element;
6801	19462	32483	3.27	2.0E-05	Y08028.1	NT	nw06d12.s1 NCI_CGAP_SS1 Homo sapiens cDNA clone IMAGE:1238519.3'
6814	19476	32497	1.12	2.0E-05	A1492800.1	EST_HUMAN	P. falciparum mRNA for AAP1 protein, partial
6824	19486		9.37	2.0E-05	A1991025.1	EST_HUMAN	qz47b08.x1 NCI_CGAP_K411 Homo sapiens cDNA clone IMAGE:2030003.3' similar to TR:O02711
7053	19744	32806	1.93	2.0E-05	AF224282.1	NT	O02711 PRO-POL-OUTPASE POLYPROTEIN; wu35p07.x1 Soares Dietschade colon_NHCD Homo sapiens cDNA clone IMAGE:2622077.3'
7053	19744	32807	1.93	2.0E-05	AF224282.1	NT	Heterodontus fransied HoxA10 (HoxA10), HoxA9 (HoxA9), HoxA7 (HoxA7), HoxA6 (HoxA6), HoxA5 (HoxA5), HoxA4 (HoxA4), HoxA3 (HoxA3), HoxA2 (HoxA2), and HoxA1 (HoxA1) genes, complete cds
7267	19861		0.83	2.0E-05	AF128847.1	NT	Heterodontus fransied HoxA10 (HoxA10), HoxA9 (HoxA9), HoxA7 (HoxA7), HoxA6 (HoxA6), HoxA5 (HoxA5), HoxA4 (HoxA4), HoxA3 (HoxA3), HoxA2 (HoxA2), and HoxA1 (HoxA1) genes, complete cds
7785	20480	33605	1.71	2.0E-05	A351040.1	EST_HUMAN	Homo sapiens Indolethylamine N-methyltransferase (HNMT) mRNA, INMT-2 allele, complete cds
9020	21710	34862	0.53	2.0E-05	BE244840.1	EST_HUMAN	ig20h05.x1 NCI_CGAP_GLI1 Homo sapiens cDNA clone IMAGE:2108369.3'
9020	21710	34863	0.53	2.0E-05	BE244840.1	EST_HUMAN	TCBAP2E1590 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP1590
9167	21837	35002	0.58	2.0E-05	P49457	SWISSPROT	TCBAP2E1590 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP1590
9167	21837	35003	0.58	2.0E-05	P49457	SWISSPROT	cDNA clone TCBAP1590
9823	22474	35677	0.49	2.0E-05	AJ163207.2	NT	COMPLEMENT DECAY-ACCELERATING FACTOR (CD55)
10035	22683	35900	0.87	2.0E-05	BF055939.1	EST_HUMAN	COMPLEMENT DECAY-ACCELERATING FACTOR (CD55)
10457	23103	36333	0.54	2.0E-05	AJ131024.1	NT	Homo sapiens chromosome 21 segment HS21C007
10457	23103	36334	0.54	2.0E-05	AJ131024.1	NT	7175g08.y1 NCI_CGAP_Brm20 Homo sapiens cDNA clone IMAGE:3340576.5'
10489	23135	36382	1.98	2.0E-05	N41751.1	EST_HUMAN	Homo sapiens class gene, exon 1-alpha Homo sapiens class gene, exon 1-alpha
10489	23135	36382	1.98	2.0E-05	N41751.1	EST_HUMAN	yw81a06.t1 Soares placenta_8to9weeks_2NtHP8to9W Homo sapiens cDNA clone IMAGE:259570.5'

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10489	23135	36363	1.98	2.0E-05	N41751.1	EST_HUMAN	yw91a06.r1 Soares_pleanta_810weeks_2NblHP8cpW Homo sapiens cDNA clone IMAGE:269670 5'
10541	19485		2.42	2.0E-05	A1601026.1	EST_HUMAN	yu35h07.x1 Soares_Dickgraeffe_colon_NHCD Homo sapiens cDNA clone IMAGE:2522077 3'
11287	23948	37243	1.33	2.0E-05	A1463285.1	EST_HUMAN	1830h09.x1 NCL_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2132033 3' similar to TR:Q13538 Q13538
11287	23948	37244	1.33	2.0E-05	A1463285.1	EST_HUMAN	ORF2: FUNCTION UNKNOWN. ;
11430	23197	36428	2.27	2.0E-05	BE175801.1	EST_HUMAN	1830h09.x1 NCL_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2132033 3' similar to TR:Q13538 Q13538
12185	25168		4.86	2.0E-05	BE348229.1	EST_HUMAN	ORF2: FUNCTION UNKNOWN. ;
12342	25155		2.27	2.0E-05	AF275948.1	NT	RC5-HT0582-280300-012-E12 HT0582 Homo sapiens cDNA
12674	25247		1.44	2.0E-05	D16583.1	NT	hw21a03.x1 NCL_CGAP_Kd11 Homo sapiens cDNA clone IMAGE:3183532 3' similar to TR:Q12832
2285	14691	27731	3.22	1.0E-05	P27448	SWISSPROT	Q12832 GLYCOPHORIN HEP2 ;
2700	15003	28143	1.6	1.0E-05	AL163282.2	NT	Homo sapiens ABCA1 (ABCA1) gene, complete cds
3641	16394	28034	1.91	1.0E-05	AF088273.1	NT	Homo sapiens ABCA1 (ABCA1) gene, complete cds
3793	18545		1.02	1.0E-05	AF223391.1	NT	Human gene for L-histidine decarboxylase, complete cds
3848	16689	29337	9.2	1.0E-05	P81274	SWISSPROT	PUTATIVE SERINE/THREONINE-PROTEIN KINASE P78
4152	18904	29623	1.2	1.0E-05	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C082
4244	18965	29608	2.62	1.0E-05	AA431119.1	EST_HUMAN	Drosophila melanogaster strain Lando 120 Suppressor of Hairless (Su(H)) gene, partial cds
4799	17930	30152	1.81	1.0E-05	AW419134.1	EST_HUMAN	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
6653	19415	32428	1.22	1.0E-05	AJ246003.1	NT	MOSAIC PROTEIN LGN
6980	18905	32530	2.58	1.0E-05	AA641848.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C003
6982	18975	32722	3.28	1.0E-05	4505844	NT	zw99g04.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:781494 5'
7677	20341		1.16	1.0E-05	P19474	SWISSPROT	xy49g11.x1 NCL_CGAP_Lu34.1 Homo sapiens cDNA clone IMAGE:2856648 3'
8813	21505		2.24	1.0E-05	AL163227.2	NT	Homo sapiens Spast gene for spastin protein
8958	21649	34700	3.02	1.0E-05	AA482578.1	EST_HUMAN	ns19g02.s1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1184114 3' similar to contains L1.L1 L1
9187	21857	35022	12.45	1.0E-05	AA236110.1	EST_HUMAN	L1 repetitive element ;
9268	22020	35189	0.62	1.0E-05	AV732190.1	EST_HUMAN	Homo sapiens phospholipase A2, group X (PLA2G10) mRNA, and translated products
9736	22389	35593	0.74	1.0E-05	AW150802.1	EST_HUMAN	52 KD RO PROTEIN (SJOGREN SYNDROME TYPE A ANTIGEN (SS-A)) (RO(SS-A))
							Homo sapiens chromosome 21 segment HS21C027
							zxd5h12.s1 Soares_tad_fetus_Nb2Hf8_9w Homo sapiens cDNA clone IMAGE:788519 3' similar to
							gbl02032 PEROXISOME PROLIFERATOR ACTIVATED RECEPTOR ALPHA (HUMAN);
							zsd05a11.1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:684332 5' similar to contains Alu
							repetitive element; contains element TAR1 repetitive element ;
							AV732190 HTF Homo sapiens cDNA clone HTFBIH01 5'
							hd41002.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2812043 3' similar to contains
							ORF.t1 ORF repetitive element ;

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9738	22389	35594	0.74	1.0E-05	AW510802.1	EST_HUMAN	h441b02.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2912043 3' similar to contains OFR.H1 OFR repetitive element;
9816	22467	35688	1.16	1.0E-05	AW291521.1	EST_HUMAN	UHH-B12-epk-e-08-0-J1.s1 NCI_CGAP_Sub4 Homo sapiens cDNA clone IMAGE:2724398 3'
9816	22467	35670	1.16	1.0E-05	AW291521.1	EST_HUMAN	UHH-B12-epk-e-08-0-J1.s1 NCI_CGAP_Sub4 Homo sapiens cDNA clone IMAGE:2724398 3'
10084	22732		1.87	1.0E-05	AW468995.1	EST_HUMAN	ha07c10.x1 NCI_CGAP_Kb12 Homo sapiens cDNA clone IMAGE:2873010 3' similar to contains L1.L1 repetitive element;
10836	23518	36760	1.97	1.0E-05	U91328.1	NT	Human hereditary haemochromatosis region, histone 2A-like protein gene, hereditary haemochromatosis (HLA-H) gene, RoRet gene, and sodium phosphate transporter (NPT3) gene, complete cds
10836	23518	36761	1.97	1.0E-05	U91328.1	NT	Human hereditary haemochromatosis region, histone 2A-like protein gene, hereditary haemochromatosis (HLA-H) gene, RoRet gene, and sodium phosphate transporter (NPT3) gene, complete cds
11854	24438	37780	1.38	1.0E-05	AF111167.2	NT	Homo sapiens jun dimerization protein gene, partial cds, cfos gene, complete cds; and unknown gene
2678	15387	28129	4.8	9.0E-06	A1583811.1	EST_HUMAN	tt73a06.x1 NCI_CGAP_HSC3 Homo sapiens cDNA clone IMAGE:2246388 3'
3092	15857	28498	3.53	9.0E-06	A1218983.1	EST_HUMAN	gg11b08.x1 Soares_placenta_8tc8week_2NkHP8b69W Homo sapiens cDNA clone IMAGE:1759191 3'
3597	16360		2.82	9.0E-06	M81755.1	NT	Human alanine:glyoxylate aminotransferase (AGXT) gene, exons 1 and 2
5315	18604	31532	2.61	9.0E-06	L23416.1	NT	Homo sapiens differentiation antigen CD20 gene, exons 5, 6
6765	19509	32534	0.8	9.0E-06	BE065042.1	EST_HUMAN	RC1-BT0313-110500-017-407 BT0313 Homo sapiens cDNA
7340	20021	33099	0.85	9.0E-06	P08547	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
7673	20337	33450	13.94	9.0E-06	A1034370.1	EST_HUMAN	ca20g01.x1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:1658912 3' similar to contains Alu repetitive element;
8363	21058	34197	1.1	9.0E-06	AL183208.2	NT	Homo sapiens chromosome 21 segment HS21C009
8881	21572	34715	2.80	9.0E-06	Q63789	SWISSPROT	SUSHI REPEAT-CONTAINING PROTEIN SRPX PRECURSOR (DRS PROTEIN) (DOWN-REGULATED BY V-SRC)
8881	21572	34716	2.89	9.0E-06	Q63789	SWISSPROT	SUSHI REPEAT-CONTAINING PROTEIN SRPX PRECURSOR (DRS PROTEIN) (DOWN-REGULATED BY V-SRC)
9122	21810	34976	4.3	9.0E-06	U35114.1	NT	Human apolipoprotein E (APOE) gene, hepatic control region HCR-2
10858	23838	36784	3.46	9.0E-06	Q10394	SWISSPROT	PUTATIVE SERINE/THREONINE-PROTEIN KINASE C22E12.14C
2532	15597	27986	1.27	8.0E-06	AW362539.1	EST_HUMAN	RC3-CT0283-201199-011-111 CT0283 Homo sapiens cDNA
10430	23076	36298	0.75	8.0E-06	P34083	SWISSPROT	FASIGLII II, PHOSPHATIDYLINOSITOL-LINKED ISOFORM PRECURSOR (FAS II)
10430	23076	36299	0.75	8.0E-06	P34083	SWISSPROT	FASIGLII II, PHOSPHATIDYLINOSITOL-LINKED ISOFORM PRECURSOR (FAS II)

Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
958	13723		2.09	7.0E-06	AA098729.1	EST_HUMAN	ab00110 a1 Strategene lung (#637210) Homo sapiens cDNA clone IMAGE:854251 3' similar to contains
1419	14187	26851	3.42	7.0E-06	7682177	NT	MER20.11 MER20 repetitive element;
2876	15943		5.93	7.0E-06	AI398262.1	EST_HUMAN	qiv16g09.x1 NCI_CGAP_U13 Homo sapiens cDNA clone IMAGE:1991298 3' similar to contains Alu repetitive element;
3551	16308		0.92	7.0E-06	AA385542.1	EST_HUMAN	EST198205 Thyroid Homo sapiens cDNA 5' end similar to EST containing L1 repeat
5609	18405		5.68	7.0E-06	AW883141.1	EST_HUMAN	QV2-OT0062-260400-173-H01 OT0082 Homo sapiens cDNA
5715	18508	31429	1.01	7.0E-06	N88946.1	EST_HUMAN	yy65c07.r1 Scores_multiple_sclerosis_2NbrMSP Homo sapiens cDNA clone IMAGE:278412 5'
8688	21380	34524	0.7	7.0E-06	11420709	NT	Homo sapiens DNA segment, numerous copies, expressed probes (OS1 gene) (DXF88S1E), mRNA
8800	22451		0.45	7.0E-06	Q61147	SWISSPROT	GERULOPLASMIN PRECURSOR (FERROXIDASE)
11930	25356	30608	2.32	7.0E-06	BF215972.1	EST_HUMAN	601881522F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4083972 5'
2918	15884	28329	1.28	6.0E-06	BE069180.1	EST_HUMAN	QV3-BT0379-010300-105-d11 BT0379 Homo sapiens cDNA
3680	16433	29076	1.08	6.0E-06	BE069180.1	EST_HUMAN	QV3-BT0379-010300-105-d11 BT0379 Homo sapiens cDNA
4705	15708	28359	1.91	6.0E-06	Q01458	SWISSPROT	OVARIAN ABUNDANT MESSAGE PROTEIN (OAM PROTEIN)
4710	17442	30074	2.21	6.0E-06	AI040099.1	EST_HUMAN	aa08a02.x1 Scores_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:1656738 3' similar to contains MER8.12 MER8 repetitive element;
5265	18071	30700	1.32	6.0E-06	AF187441.1	NT	Mus musculus E-cadherin binding protein E7 mRNA, complete cds
5324	18127	30787	1.06	6.0E-06	Q02040	SWISSPROT	PROTEIN XE7
9768	22407		1.48	6.0E-06	AW801912.1	EST_HUMAN	IL6-UM0070-110400-063-g02 UM0070 Homo sapiens cDNA
12755	25016	30979	2.27	6.0E-06	11418157	NT	Homo sapiens calcium channel, voltage-dependent, alpha 1I subunit (CACNA1I), mRNA
5970	18752	31713	3.27	6.0E-06	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C048
6245	18019	31893	2.31	5.0E-06	U07561.1	NT	Human ABL gene, exon 1b and intron 1b, and putative M8804 Met protein (M8804 Met) gene, complete cds
7134	19821	32887	1.1	5.0E-06	AB007546.1	NT	Homo sapiens gene for LECT2, complete cds
8359	21052	34192	0.53	5.0E-06	AW856972.1	EST_HUMAN	RC1-CT0302-120200-013-H02 CT0302 Homo sapiens cDNA
8369	21052	34193	0.83	5.0E-06	AW856972.1	EST_HUMAN	RC1-CT0302-120200-013-H02 CT0302 Homo sapiens cDNA
10002	22650	35882	0.16	5.0E-06	AA313620.1	EST_HUMAN	EST185498 Odon cartharoma (HCC) cell line Homo sapiens cDNA 5' end
10410	23058	36273	0.45	5.0E-06	P06681	SWISSPROT	COMPLEMENT C2 PRECURSOR (C3/C5 CONVERTASE)
12649	24953	30987	2.83	5.0E-06	AI065045.1	EST_HUMAN	HA0877 Human fetal liver cDNA library Homo sapiens cDNA
652	13411	28049	6.1	4.0E-06	R16287.1	EST_HUMAN	ye48c03.r1 Scores_infant_brain_1NIB Homo sapiens cDNA clone IMAGE:53254 5' similar to contains Alu repetitive element; contains L1 repetitive element;
826	13596	26206	7.07	4.0E-06	AW103354.1	EST_HUMAN	xx68g12.x1 NCI_CGAP_Eac2 Homo sapiens cDNA clone IMAGE:2589574 3' similar to contains Alu repetitive element; contains element MIER21 repetitive element;

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1311	14059	26733	4.64	4.0E-06	AF334928.1	EST_HUMAN	fb334928.x1 NCI_CGAP_HSC2 Homo sapiens cDNA clone IMAGE:2056168 3'
1311	14059	26734	4.64	4.0E-06	AF334928.1	EST_HUMAN	fb334928.x1 NCI_CGAP_HSC2 Homo sapiens cDNA clone IMAGE:2056168 3'
1457	14204	26889	1.8	4.0E-06	BF366612.1	EST_HUMAN	QV2-NT0048-200600-250-h07 NT0048 Homo sapiens cDNA
2261	14988	27728	2.17	4.0E-06	AW015401.1	EST_HUMAN	UH-HBIO-eat-f-05-Q-UJ.s1 NCI_CGAP_Sub1 Homo sapiens cDNA clone IMAGE:2710425 3'
3060	15826	28471	0.9	4.0E-06	AF198349.1	NT	Gallus gallus Dech2 protein (Dech2) mRNA, complete cds
3874	16624	29262	1.05	4.0E-06	AW848295.1	EST_HUMAN	IL3-CT0214-160200-074-B03 CT0214 Homo sapiens cDNA
4756	17488	30115	1.89	4.0E-06	AB88639.1	EST_HUMAN	w64c10.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2432582 3' similar to contains element
8397	21090	34225	0.56	4.0E-06	O16393	SWISSPROT	MER22 repetitive element;
8689	21391	34536	3.58	4.0E-06	AF009660.1	NT	TRANSMEMBRANE PROTEASE, SERINE 2
9807	22260	36446	1.24	4.0E-06	AJ277285.1	NT	Homo sapiens T cell receptor beta locus, TCRBV7S3A2 to TCRBV12S2 region
11427	23194	36425	4.21	4.0E-06	AB007955.1	NT	Homo sapiens SPP2 gene for secreted phosphoprotein 24 precursor, exons 1-8
2160	14980	27624	1.75	3.0E-06	AA700582.1	EST_HUMAN	Homo sapiens mRNA, chromosome 1 specific transcript KIAA0486
2160	14980	27625	1.75	3.0E-06	AA700582.1	EST_HUMAN	z34b08.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:432683 3' similar to contains L1.1 L1 repetitive element;
2283	14989		1.44	3.0E-06	AF202036.1	NT	z34b08.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:432683 3' similar to contains L1.1 L1 repetitive element;
2022	15988	28332	1.05	3.0E-06	AA868218.1	EST_HUMAN	Homo sapiens PP1200 mRNA, complete cds
3259	16021		2.05	3.0E-06	AB67779.1	EST_HUMAN	ak48g11.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1408252 3' similar to contains LTR1.8 LTR1 repetitive element;
3763	18515	20152	1.13	3.0E-06	BE047094.1	EST_HUMAN	w22a03.x1 NCI_CGAP_UH1 Homo sapiens cDNA clone IMAGE:2426616 3' similar to TR:O60734 O60734 LINE-1 LIKE PROTEIN; contains L1.12 L1 repetitive element;
3763	18515	29153	1.13	3.0E-06	BE047094.1	EST_HUMAN	hg64d12.x1 NCI_CGAP_HIN13 Homo sapiens cDNA clone IMAGE:3124151 3'
4524	17259	29893	3.74	3.0E-06	X54818.1	NT	hg64d12.x1 NCI_CGAP_HIN13 Homo sapiens cDNA clone IMAGE:3124151 3'
6088	18947	31811	0.93	3.0E-06	AU159412.1	EST_HUMAN	Homo sapiens gene for alpha-1-microglobulin-bikunin, exons 1-5 (encoding alpha-1-microglobulin, N-terminus.)
7129	19817		2.43	3.0E-06	P08548	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
7981	20676	33801	0.83	3.0E-06	BE562984.1	EST_HUMAN	AU159412 THYROT1 Homo sapiens cDNA clone THYROT1001602 3'
8684	21276	34413	0.86	3.0E-06	P07743	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
12349	24755		3.84	3.0E-06	AW385262.1	EST_HUMAN	601336213F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3660314 5'
197	13010		2.81	2.0E-06	P54366	SWISSPROT	PAROTID SECRETORY PROTEIN PRECURSOR (PSP)
1561	14308		4.45	2.0E-06	P21414	SWISSPROT	RCO-L T0001-261189-011-A03 LT0001 Homo sapiens cDNA
2376	15098	27838	4.8	2.0E-06	AI672138.1	EST_HUMAN	HOMEOBOX PROTEIN GOOSECOID
							POL POLYPROTEIN [CONTAINS: PROTEASE; REVERSE TRANSCRIPTASE; ENDONUCLEASE]
							wa04a03.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2297088 3' similar to contains MER30.b1
							MER30 repetitive element;

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2469	15187	27826	2.37	2.0E-06	P04929	SWISSPROT	HISTIDINE-RICH GLYCOPROTEIN PRECURSOR
2571	15285	28023	1.88	2.0E-06	P06719	SWISSPROT	KNOB-ASSOCIATED HISTIDINE-RICH PROTEIN PRECURSOR (KAHRP)
3509	16285	28919	1.12	2.0E-06	AV657555.1	EST_HUMAN	AV657555 GLC Homo sapiens cDNA clone GLCFDB05 3'
3744	16497	29132	1.59	2.0E-06	AA173518.1	EST_HUMAN	zp02e05.r1 Stratiogene ovarian cancer (8037219) Homo sapiens cDNA clone IMAGE:595232 5'
3753	16505	29141	0.82	2.0E-06	AW450215.1	EST_HUMAN	U1H-B13-aky-g-05-0-U1.e1 NCI CGAP Sub5 Homo sapiens cDNA clone IMAGE:2736176 3'
3758	16510	29146	1.82	2.0E-06	AB030896.1	NT	Mus musculus gene for pcdarant receptor A10, complete cds
5988	18779		0.63	2.0E-06	AA974832.1	EST_HUMAN	cr34h01.s1 NCI CGAP Lu5 Homo sapiens cDNA clone IMAGE:1658609 3' similar to contains Alu repetitive element;
6028	18808	31768	0.83	2.0E-06	AI539448.1	EST_HUMAN	hs51f05.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2090241 3' similar to TR:Q13537
6348	19118	32108	5.47	2.0E-06	AB19424.1	EST_HUMAN	Q13537 MER37 TRANSPORTABLE ELEMENT, COMPLETE CONSENSUS SEQUENCE. ;
7818	20513		1.63	2.0E-06	AW869223.1	EST_HUMAN	wf60b04.x1 NCI CGAP_Lym12 Homo sapiens cDNA clone IMAGE:2410063 3'
7988	20883	33808	0.57	2.0E-06	T12238.1	EST_HUMAN	MR3-SN0087-120400-002-02 SN0087 Homo sapiens cDNA
8735	21427		0.6	2.0E-06	AA772497.1	EST_HUMAN	A447R Heart Homo sapiens cDNA clone A447
8747	21439	34586	1.8	2.0E-06	H62051.1	EST_HUMAN	zh27c11.s1 Soares_pineal_gland_N3HPG Homo sapiens cDNA clone IMAGE:413300 3' similar to TR:P70467 P70467 REVERSE TRANSCRIPTASE ;
9116	21804	34969	0.82	2.0E-06	AF003529.1	NT	yus37c04.1 Soares ovary tumor NbHOT Homo sapiens cDNA clone IMAGE:235974 5' similar to gb:X74829
9116	21804	34970	0.82	2.0E-06	AF003529.1	NT	KERATIN, TYPE II CYTOSKELETAL 8 (HUMAN);
9136	21823		0.46	2.0E-06	AI473450.1	EST_HUMAN	Homo sapiens glypican 3 (GPC3) gene, partial cds and flanking repeat regions
9800	22253	35438	1	2.0E-06	N30578.1	EST_HUMAN	Homo sapiens glypican 3 (GPC3) gene, partial cds and flanking repeat regions
9819	22470		0.63	2.0E-06	AV748989.1	EST_HUMAN	g16g10.x1 NCI CGAP_Gae4 Homo sapiens cDNA clone IMAGE:2141730 3'
12251	25357	30608	2.1	2.0E-06	P23249	SWISSPROT	yw66e03.s1 Soares_pleocenta_8to8weeks_2NkHPGc9W Homo sapiens cDNA clone IMAGE:257212 3'
32	12860	26477	2.36	1.0E-06	O76082	SWISSPROT	AV748989 NPC Homo sapiens cDNA clone NPCAXD05 5'
642	13421	28060	2.62	1.0E-06	AF084364.1	NT	PROTEIN MOV-10
1434	14181	28886	1.61	1.0E-06	P09125	SWISSPROT	ORGANIC CATION/CARNITINE TRANSPORTER 2 (SOLUTE CARRIER FAMILY 22, MEMBER 5) (HIGH-AFFINITY SODIUM-DEPENDENT CARNITINE COTRANSPORTER)
1514	14261	28947	1.67	1.0E-06	AL183278.2	NT	Mus musculus D6MAGE protein (D6MAGE) mRNA, complete cds
1584	14311	28997	1.27	1.0E-06	AA034141.1	EST_HUMAN	MEROZOITE SURFACE PROTEIN CMZ-8
1584	14311	28998	1.27	1.0E-06	AA034141.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C078
1578	14325		1.34	1.0E-06	P27825	SWISSPROT	z08a12.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:428882 3' similar to contains Alu repetitive element;
							z08a12.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:428882 3' similar to contains Alu repetitive element;
							DNA-DIRECTED RNA POLYMERASE III LARGEST SUBUNIT



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Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1987	14723	27443	5.09	1.0E-06	AF184814.1	NT	Homo sapiens p47-phox (NCF1) gene, complete cds
1987	14723	27444	5.09	1.0E-06	AF184814.1	NT	Homo sapiens p47-phox (NCF1) gene, complete cds
4336	17075	28703	12.81	1.0E-06	U07561.1	NT	Human ABL gene, exon 1b and intron 1b, and putative M8604 Met protein (M8604 Met) gene, complete cds
5208	18016	30638	5.07	1.0E-06	BF333015.1	EST_HUMAN	MR1-BT0800-030700-002-c06 BT0800 Homo sapiens cDNA
5232	18038	30666	0.93	1.0E-06	BE834518.1	EST_HUMAN	MR3-FN0004-090600-001-c04 FN0004 Homo sapiens cDNA
5232	18038	30668	0.93	1.0E-06	BE834518.1	EST_HUMAN	MR3-FN0004-090600-001-c04 FN0004 Homo sapiens cDNA
5389	18189	30881	1.22	1.0E-06	O90613	SWISSPROT	15 KDA SELENOPROTEIN PRECURSOR
5706	18500		0.78	1.0E-06	BE063627.1	EST_HUMAN	CXMO-BT0281-031199-087-H04 BT0281 Homo sapiens cDNA
6773	19517	32545	6.91	1.0E-06	P02871	SWISSPROT	FIBRINOGEN ALPHA-2(A) CHAIN PRECURSOR
7644	25427		0.63	1.0E-06	BE186330.1	EST_HUMAN	IL5-HT0730-020500-074-g01 HT0730 Homo sapiens cDNA
7900	20595		0.77	1.0E-06	AA912623.1	EST_HUMAN	cd29-c08.s1 Scores_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1524878 3'
8171	20866	33997	1.2	1.0E-06	AB347010.1	EST_HUMAN	qp54-c02.x1 NCI_CGAP_C08 Homo sapiens cDNA clone IMAGE:1928842 3'
8387	21080	34215	1.31	1.0E-06	AI287878.1	EST_HUMAN	q23f06.x1 NCI_CGAP_Lym8 Homo sapiens cDNA clone IMAGE:1982435 3' similar to contains element
9204	22083	35255	0.94	1.0E-06	N74635.1	EST_HUMAN	z155a01.s1 Scores fetal liver spleen 1NLS Homo sapiens cDNA clone IMAGE:298472 3'
9279	22033	35205	0.55	1.0E-06	Q39575	SWISSPROT	DYNEIN GAMMA CHAIN, FLAGELLAR OUTER ARM
9581	22234	35417	4.28	1.0E-06	U82868.1	NT	Homo sapiens shox gene, alternatively spliced products, complete cds
9581	22234	35418	4.28	1.0E-06	U82868.1	NT	Homo sapiens shox gene, alternatively spliced products, complete cds
9627	22280	35470	4.76	1.0E-06	AA132811.1	EST_HUMAN	z017a08.r1 Stragene ccln1 (#837204) Homo sapiens cDNA clone IMAGE:587174 5'
9688	22340		3.37	1.0E-06	AA449237.1	EST_HUMAN	z04411.s1 Scores total testis Nb2Hf8_gw Homo sapiens cDNA clone IMAGE:785463 3' similar to
10385	23031		1.06	1.0E-06	AL163203.2	NT	gb:D26129 RIBONUCLEASE PANCREATIC PRECURSOR (HUMAN);
11648	24245		3.85	1.0E-06	AW890941.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C003
11724	24318	37841	1.38	1.0E-06	AA164914.1	EST_HUMAN	RC4-NT0084-120500-012-b03 NT0084 Homo sapiens cDNA
11724	24318	37842	1.38	1.0E-06	AA164914.1	EST_HUMAN	z042a02.s1 Stragene hNT neuron (#837293) Homo sapiens cDNA clone IMAGE:632364 3' similar to
12380	14723	27443	1.79	1.0E-06	AF184814.1	NT	SW:POL_SMSAV P03359 POL POLYPROTEIN;
12390	14723	27444	1.79	1.0E-06	AF184814.1	NT	SW:POL_SMSAV P03359 POL POLYPROTEIN;
351	13150	25790	2.24	9.0E-07	AF003529.1	NT	Homo sapiens p47-phox (NCF1) gene, complete cds
351	13150	25791	2.24	9.0E-07	AF003529.1	NT	Homo sapiens glypican 3 (GPC3) gene, partial cds and flanking repeat regions
8306	21000		0.53	9.0E-07	AL163280.2	NT	Homo sapiens glypican 3 (GPC3) gene, partial cds and flanking repeat regions
11212	23875	37161	2.87	9.0E-07	AL163281.2	NT	Homo sapiens chromosome 21 segment HS21C081

Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11733	24326	37860	1.3	9.0E-07	AF087913.1	NT	Human endogenous retrovirus HERV-P-1470
4719	17451	30064	3.26	8.0E-07	AL288596.1	EST_HUMAN	q82g07.x1 Soares_NIHMPu_S1 Homo sapiens cDNA clone IMAGE:1878876 3'
4719	17451	30065	3.26	8.0E-07	AL288596.1	EST_HUMAN	q82g07.x1 Soares_NIHMPu_S1 Homo sapiens cDNA clone IMAGE:1878876 3'
6796	18687		9.43	8.0E-07	P21414	SWISSPROT	POL POLYPROTEIN [CONTAINS: PROTEASE; REVERSE TRANSCRIPTASE; ENDONUCLEASE]
7801	20598		8.73	8.0E-07	AF135416.1	NT	Homo sapiens UDP-glucuronosyltransferase gene, complete cds
11822	24219		6.59	8.0E-07	T07770.1	EST_HUMAN	EST05660 Fetal brain, Striatum (cat#36206) Homo sapiens cDNA clone HFBEN89
11912	24478		8.22	8.0E-07	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
1858	14596	27312	0.91	7.0E-07	AF167341.1	NT	Homo sapiens membrane Interleukin 1 receptor accessory protein (IL1RAP) gene, exons 10 and 11
5432	18231	30944	0.72	7.0E-07	6005700	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 8 (ABCA8), mRNA
5432	18231	30945	0.72	7.0E-07	6005700	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 8 (ABCA8), mRNA
1905	14642	27352	2.88	8.0E-07	AW855558.1	EST_HUMAN	CM3-GT0277-221068-024-011 C10277 Homo sapiens cDNA
2498	15213	27956	4.52	8.0E-07	AF019413.1	NT	Homo sapiens HLA class III region containing tenascin X (tenascin-X) gene, partial cds; cytochrome P450 21-hydroxylase (CYP21B), complement component C4 (C4B) G11, helicase (SKI2W), RD, complement factor B (BF), and complement component C2 (C2) genes, >
3955	16705		1.83	8.0E-07	P41479	SWISSPROT	HYPOTHETICAL 24.1 KD PROTEIN IN LEF-P33 INTERGENIC REGION
9040	21730	34985	1.52	8.0E-07	BF001867.1	EST_HUMAN	7g9407.x1 NCL_CGAP_Co16 Homo sapiens cDNA clone IMAGE:3314149 3' similar to TR:075920 O75920 4F5L..
11836	24420	37761	1.3	8.0E-07	BE063509.1	EST_HUMAN	CM0-BT0281-031198-087-003 BT0281 Homo sapiens cDNA
12158	25307		2.28	8.0E-07	AW903222.1	EST_HUMAN	CM4-NN1028-260300-121-H12 NN1028 Homo sapiens cDNA
318	13121		1.94	5.0E-07	AB181893.1	EST_HUMAN	wh84f10.x1 NCL_CGAP_Kd11 Homo sapiens cDNA clone IMAGE:2385547 3'
1035	13795		4.25	5.0E-07	AA380630.1	EST_HUMAN	EST036015 Supt cells Homo sapiens cDNA 5' and
3028	15794		0.88	5.0E-07	AB181893.1	EST_HUMAN	wh84f10.x1 NCL_CGAP_Kd11 Homo sapiens cDNA clone IMAGE:2385547 3'
6029	18808	31769	0.9	5.0E-07	U95097.1	NT	Mus musculus OG-2 homeodomain protein (OG-2) gene, partial cds
6964	19446	32463	1.69	5.0E-07	AI933981.1	EST_HUMAN	ig000001.x1 NCL_CGAP_CLL1 Homo sapiens cDNA clone IMAGE:2107953 3' similar to contains Alu repetitive element; contains element A3R repetitive element;
6964	19446	32464	1.69	5.0E-07	AI933981.1	EST_HUMAN	ig000001.x1 NCL_CGAP_CLL1 Homo sapiens cDNA clone IMAGE:2107953 3' similar to contains Alu repetitive element; contains element A3R repetitive element;
7248	19933	33008	17	5.0E-07	AW070885.1	EST_HUMAN	xs310001.x1 NCL_CGAP_BT18 Homo sapiens cDNA clone IMAGE:2568362 3' similar to gb:U15341 CYTOCHROME C OXIDASE POLYPEPTIDE VIA-LIVER (HUMAN);
8173	20867	33999	0.74	5.0E-07	Q9WUQ1	SWISSPROT	ADAM-TS 1 PRECURSOR (A DISINTEGRIN AND METALLOPROTEINASE WITH THROMBOSPONDIN MOTIFS 1) (ADAMTS-1) (ADAM-TS1)
8388	21081		0.82	5.0E-07	P06593	SWISSPROT	S-ANTIGEN PROTEIN PRECURSOR
10265	22913	36123	4.94	5.0E-07	AI908987.1	EST_HUMAN	CM-BT178-220499-014 BT178 Homo sapiens cDNA

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10560	23256	36493	1.28	5.0E-07	P08547	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
11500	24101	37413	4.04	5.0E-07	P11087	SWISSPROT	COLLAGEN ALPHA 1(I) CHAIN PRECURSOR
11574	24173		2.62	5.0E-07	AJ271736.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
12561	25211		3.48	5.0E-07	AW802937.1	EST_HUMAN	QV0-CT0383-210400-204-b12 CT0383 Homo sapiens cDNA
3981	16729	26364	2.02	4.0E-07	AW008602.1	EST_HUMAN	w84405.x1 NCI_CGAP_Cc3 Homo sapiens cDNA clone IMAGE:2504897 3'
7078	19769		0.83	4.0E-07	AJ272286.1	NT	Homo sapiens SPP2 gene for secreted phosphoprotein 24 precursor, exons 1-8
7167	19854	32823	1.74	4.0E-07	Q9Z2V6	SWISSPROT	HISTONE DEACETYLASE 5 (HD5) (HISTONE DEACETYLASE MHDA1)
7167	19854	32924	1.74	4.0E-07	Q9Z2V6	SWISSPROT	HISTONE DEACETYLASE 5 (HD5) (HISTONE DEACETYLASE MHDA1)
7823	20518	33644	0.6	4.0E-07	AL163207.2	NT	Homo sapiens chromosome 21 segment HS21C007
9049	21840	34787	5.41	4.0E-07	AW419134.1	EST_HUMAN	xy4611.1 NCI_CGAP_Lu94.1 Homo sapiens cDNA clone IMAGE:2856548 3'
10027	22675	35890	0.47	4.0E-07	BE901976.1	EST_HUMAN	601676748F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3959651 5'
10027	22675	35891	0.47	4.0E-07	BE901976.1	EST_HUMAN	601676748F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3959651 5'
10223	22871	36084	0.49	4.0E-07	AL163218.2	NT	Homo sapiens chromosome 21 segment HS21C018
10856	23536	36781	3.14	4.0E-07	AJ765528.1	EST_HUMAN	w81508.x1 NCI_CGAP_K1212 Homo sapiens cDNA clone IMAGE:2369703 3'
10856	23536	36782	3.14	4.0E-07	AJ765528.1	EST_HUMAN	w81508.x1 NCI_CGAP_K1212 Homo sapiens cDNA clone IMAGE:2369703 3'
11184	23849		1.66	4.0E-07	BE001828.1	EST_HUMAN	PM1-BN0083-030300-003-s12 BN0083 Homo sapiens cDNA
431	13217	25862	9.84	3.0E-07	U19719.1	NT	Human microtubule-associated glycoprotein (MFAP2) gene, putative promoter region and alternatively spliced untranslated exons
560	13350	25978	2.12	3.0E-07	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
1353	14101	26776	2.67	3.0E-07	M89149.1	NT	Human polymorphic microsatellite DNA
1622	14369		2.03	3.0E-07	M84857.1	NT	Human Igk subgroup I germline gene, exons 1 and 2, V-region 018 allele
2039	14773		1.42	3.0E-07	AA526763.1	EST_HUMAN	ri556-09.s1 NCI_CGAP_Ov2 Homo sapiens cDNA clone IMAGE:360825 similar to contains Alu repetitive element; contains L1.13 L1 repetitive element;
2286	15011	27749	1.83	3.0E-07	M96149.1	NT	Human polymorphic microsatellite DNA
2472	15190	27830	7.61	3.0E-07	BE006077.1	EST_HUMAN	MR0-BN0115-020300-001-F11 BN0115 Homo sapiens cDNA
2472	15190	27831	7.61	3.0E-07	BE006077.1	EST_HUMAN	MR0-BN0115-020300-001-F11 BN0115 Homo sapiens cDNA
3031	15797	28443	1.16	3.0E-07	T84704.1	EST_HUMAN	y50112.1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:111695 5'
3157	15920	28566	1.45	3.0E-07	P38739	SWISSPROT	HYPOTHETICAL 63.8 KD PROTEIN IN GUT1-RM1 INTERGENIC REGION PRECURSOR
4678	17412	30047	7.42	3.0E-07	AV650201.1	EST_HUMAN	AV50201 GLC Homo sapiens cDNA clone GLCCGD01 3'
4711	17443	30075	0.86	3.0E-07	AJ797236.1	EST_HUMAN	w86612.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2347967 3'
5004	17727	30330	1.3	3.0E-07	T57850.1	EST_HUMAN	yc14109.s1 Stratiene lung (#637210) Homo sapiens cDNA clone IMAGE:80705 3' similar to similar to gb:M62882 ARACHIDONATE 12-LIPOXYGENASE (HUMAN)
5004	17727	30331	1.3	3.0E-07	T57850.1	EST_HUMAN	yc14109.s1 Stratiene lung (#637210) Homo sapiens cDNA clone IMAGE:80705 3' similar to similar to gb:M62882 ARACHIDONATE 12-LIPOXYGENASE (HUMAN)

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5580	18377	31290	12.43	3.0E-07	O88807	SWISSPROT	PROTEIN-ARGININE DEIMINASE TYPE IV (PEPTIDYLARGININE DEIMINASE IV) (PAD-R4)
5883	18669	31610	0.83	3.0E-07	O42280	SWISSPROT	(PEPTIDYLARGININE DEIMINASE TYPE ALPHA)
6803	18368		5.57	3.0E-07	AA015175.1	EST_HUMAN	WNT-14 PROTEIN PRECURSOR
7409	20088	33170	3.48	3.0E-07	AW797168.1	EST_HUMAN	cc04c10.s1 NCL_CGAP_G081 Homo sapiens cDNA clone IMAGE:1339890 3'
7581	20231		0.79	3.0E-07	AI691065.1	EST_HUMAN	QV1-JM0038-200300-115-g02 UM0038 Homo sapiens cDNA tw28f11.x1 NCL_CGAP_Ov35 Homo sapiens cDNA clone IMAGE:2281037 3' similar to contains Alu repetitive element; contains element MSR1 MSR1 repetitive element;
8028	21718	34872	0.85	3.0E-07	P33240	SWISSPROT	CLEAVAGE STIMULATION FACTOR, 64 KD SUBUNIT (CSTF 64 KD SUBUNIT) (CF-1 64 KD SUBUNIT)
9028	21718	34873	0.85	3.0E-07	P33240	SWISSPROT	CLEAVAGE STIMULATION FACTOR, 64 KD SUBUNIT (CSTF 64 KD SUBUNIT) (CF-1 64 KD SUBUNIT)
11484	24085		1.45	3.0E-07	BE439408.1	EST_HUMAN	HTM1-025F1 HTM1 Homo sapiens cDNA
11856	24253		1.75	3.0E-07	AF029308.1	NT	Homo sapiens chromosome 9 duplication of the T cell receptor beta locus and tyrosinogen gene families
12781	25043		5.1	3.0E-07	AJ132352.1	NT	Rattus norvegicus mRNA for 45 kDa secretory protein, partial
27	12855	25471	4.15	2.0E-07	AF282088.1	NT	Homo sapiens TRF2-interacting telomeric RAP1 protein (RAP1) mRNA, complete cds
150	12986	26808	9	2.0E-07	L77589.1	NT	Homo sapiens DiGeorge syndrome critical region, telomeric end
150	12985	26807	9	2.0E-07	L77589.1	NT	Homo sapiens DiGeorge syndrome critical region, telomeric end
177	12988	26829	44.15	2.0E-07	U38849.1	NT	Fugu rubripes beta-cytoplasmic(vesicular) actin gene, complete cds
731	13505	26180	2.45	2.0E-07	AF003530.1	NT	Homo sapiens homeobox protein CDX4 (CDX4) gene, complete cds and flanking repeat regions
731	13505	26161	2.45	2.0E-07	AF003530.1	NT	Homo sapiens homeobox protein CDX4 (CDX4) gene, complete cds and flanking repeat regions
744	13517		0.82	2.0E-07	P11369	SWISSPROT	RETROVIRUS-RELATED POL POLYPROTEIN [CONTAINS: REVERSE TRANSCRIPTASE; ENDONUCLEASE]
922	13689	26353	3.73	2.0E-07	AA223280.1	EST_HUMAN	z08b07.s1 Strabegene NT2 neuronal precursor 937230 Homo sapiens cDNA clone IMAGE:650968 3' similar to gb:U31880 GLYCOPHORIN A PRECURSOR (HUMAN); contains Alu repetitive element;
923	13690	26354	2.15	2.0E-07	T63042.1	EST_HUMAN	yc15p04.s1 Strabegene lung (#937210) Homo sapiens cDNA clone IMAGE:80790 3' similar to contains L1 repetitive element;
1140	13895	26556	1.37	2.0E-07	Q26768	SWISSPROT	I/6 AUTOANTIGEN
1596	14342	27032	2.96	2.0E-07	Q09701	SWISSPROT	HYPOTHETICAL 72.6 KD PROTEIN G2F7.10 IN CHROMOSOME 1
3678	18429	28070	15.93	2.0E-07	AF125348.1	NT	Homo sapiens caveolin 1 (CAV1) gene, exon 3 and partial cds
5059	17778	30395	0.84	2.0E-07	AW070995.1	EST_HUMAN	xa05h07.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2567485 3' similar to WP:C38H2.1 CE00923 PROBABLE RABGAP DOMAINS;

Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5059	17778	30398	0.84	2.0E-07	AW070895.1	EST_HUMAN	xa05h07.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2567485 3' similar to WP:C3842.1
5260	18088	30884	1.21	2.0E-07	AW888088.1	EST_HUMAN	CE00923 PROBABLE RABGAP DOMAINS;
6458	25090	32223	0.81	2.0E-07	AW448988.1	EST_HUMAN	RC3-NN0088-280400-021-g11 NN0088 Homo sapiens cDNA
6565	18330	32337	1.79	2.0E-07	AI208715.1	EST_HUMAN	UI-H-B13-ake-b-01-UJ.s1 NC1_CGAP_Sub6 Homo sapiens cDNA clone IMAGE:2734008 3'
7568	20238	33342	0.67	2.0E-07	X95159.1	NT	qg56d05.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1839177 3'
8369	21062		4.08	2.0E-07	AV728390.1	EST_HUMAN	H.sapiens brc2 gene exon 9
8695	21287	34426	0.97	2.0E-07	AA035198.1	EST_HUMAN	AV728390 HTC Homo sapiens cDNA clone HTCAEG02 5'
9661	22313		2.8	2.0E-07	AL193303.2	NT	zk27g08.s1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:471808 3'
10167	22815	36033	5.41	2.0E-07	AW882507.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21G103
10986	23032	36245	0.9	2.0E-07	P00751	SWISSPROT	OM4-NN0003-280300-124-e08 NN0003 Homo sapiens cDNA
10388	23032	36246	0.9	2.0E-07	P00751	SWISSPROT	COMPLEMENT FACTOR B PRECURSOR (C3/C5 CONVERTASE) (PROPERDIN FACTOR B)
11871	24945		2.44	2.0E-07	BE153717.1	EST_HUMAN	(GLYCINE-RICH BETA GLYCOPROTEIN) (GBG) (PBF2)
11953	25212		2.39	2.0E-07	AI732462.1	EST_HUMAN	COMPLEMENT FACTOR B PRECURSOR (C3/C5 CONVERTASE) (PROPERDIN FACTOR B)
1080	13638		1.97	1.0E-07	AL163282.2	NT	(GLYCINE-RICH BETA GLYCOPROTEIN) (GBG) (PBF2)
2381	15103	27842	1.11	1.0E-07	P10263	SWISSPROT	PMO-HT0339-280100-006-H07 HT0339 Homo sapiens cDNA
2830	14259	28945	2.51	1.0E-07	P09266	SWISSPROT	zn85h11.x5 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone IMAGE:365029 3' similar to
3727	13838		1.29	1.0E-07	AL163282.2	NT	contains THR.b2 THR repetitive element;
4260	17001	28631	2.76	1.0E-07	AV718662.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C082
4260	17001	28632	2.76	1.0E-07	AV718662.1	EST_HUMAN	RETROVIRUS-RELATED GAG POLYPROTEIN (VERSION 1)
4680	17424		0.93	1.0E-07	O75820	SWISSPROT	GLYCOPROTEIN GPV
5072	17791	30406	0.83	1.0E-07	AA019181.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C082
6410	19178	32177	0.87	1.0E-07	U82871.2	NT	AV718662 GLC Homo sapiens cDNA clone GLCFNF04 5'
6768	19512	32537	5.24	1.0E-07	BE047871.1	EST_HUMAN	AV718662 GLC Homo sapiens cDNA clone GLCFNF04 5'
6768	19512	32538	5.24	1.0E-07	BE047871.1	EST_HUMAN	ZINC FINGER PROTEIN 188
7392	20071	33150	9.08	1.0E-07	N56081.1	EST_HUMAN	zn56g02.t1 Soares retina N2b4-HR Homo sapiens cDNA clone IMAGE:363028 5'
7548	20218	33320	0.67	1.0E-07	BF375909.1	EST_HUMAN	Homo sapiens chromosome Xq28 melanoma antigen family A2a (MAGEA2A), melanoma antigen family A12
7548	20218	33321	0.67	1.0E-07	BF375909.1	EST_HUMAN	(MAGEA12), melanoma antigen family A2b (MAGEA2B), melanoma antigen family A3 (MAGEA3), caltractin
7577	20246	33351	1.31	1.0E-07	AL163281.2	NT	(CAL.T), NAD(P)H dehydrogenase-like protein (NSDHL), and Lp

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Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7721	20385	33489	0.64	1.0E-07	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
8114	20808	33941	2.73	1.0E-07	P97435	SWISSPROT	ENTEROPEPTIDASE (ENTEROKINASE)
8114	20808	33942	2.73	1.0E-07	P97435	SWISSPROT	ENTEROPEPTIDASE (ENTEROKINASE)
8853	21544	34681	2.78	1.0E-07	AA893576.1	EST_HUMAN	251e10.s1 Soares fetal liver spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:434346 3'
9170	21840	35005	0.97	1.0E-07	P57110	SWISSPROT	ADAM-TS 8 PRECURSOR (A DISINTEGRIN AND METALLOPROTEINASE WITH THROMBOSPONDIN MOTIFS 8) (ADAMTS-8) (ADAM-TS8) (METH-2)
9517	22170	35353	0.45	1.0E-07	BE327843.1	EST_HUMAN	hu28h08.x1 NCI_CGAP_Mel15 Homo sapiens cDNA clone IMAGE:3171419 3' similar to contains MER18.13
9838	22487	35689	2.77	1.0E-07	BF674524.1	EST_HUMAN	MER18 repetitive element;
9844	22495	35686	1.21	1.0E-07	AA386311.1	EST_HUMAN	602137714F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4274426 5'
10362	23009		1.28	1.0E-07	AL163282.2	NT	EST185054 Brain IV Homo sapiens cDNA
12212	25188	30810	3.83	1.0E-07	BE048770.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C082
12514	24984		1.87	1.0E-07	X51755.1	NT	fr53c11.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3132212 3' similar to TR:085722 095722
7181	19867	32940	0.84	9.0E-08	AI639362.1	EST_HUMAN	Human lambda-immunoglobulin constant region complex (germline)
9787	22438	35645	1.88	9.0E-08	AV734819.1	EST_HUMAN	ts51b08.x1 Soares NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2080195 3'
11136	23804	37082	1.71	9.0E-08	AI891052.1	EST_HUMAN	AV734819 cda Homo sapiens cDNA clone cdABFB06 5'
11688	24263	37587	2.8	9.0E-08	AL163301.2	NT	wn30a07.x1 NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2446832 3' similar to contains OFR.12
12186	24648		4.44	9.0E-08	AJ251973.1	NT	OFR repetitive element;
593	15546		3.7	8.0E-08	AJ811352.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C101
1028	13788		0.72	8.0E-08	BE795469.1	EST_HUMAN	Homo sapiens partial steretr-1 gene
3532	16288		1.53	8.0E-08	BE795469.1	EST_HUMAN	wd16b05.x1 Soares NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2328273 3'
8638	21330	34474	3.05	8.0E-08	A1752367.1	EST_HUMAN	601580133F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3943976 5'
8638	21330	34475	3.05	8.0E-08	A1752367.1	EST_HUMAN	601580133F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3943976 5'
8627	22180	35364	2.83	8.0E-08	AW970693.1	EST_HUMAN	cn15c02.x1 Normal Human Trabecular Bone Cells Homo sapiens cDNA clone NHTBC_cn15c02 random
10461	23107	36338	0.47	8.0E-08	AF111167.2	NT	EST382776 IMAGE resequences, MACK Homo sapiens cDNA
11211	23874		2.1	8.0E-08	AF253417.1	NT	Homo sapiens jun dimerization protein gene, partial cds; cfos gene, complete cds; and unknown gene
78	12904	25542	2.66	7.0E-08	Q02357	SWISSPROT	Homo sapiens microsomal epoxide hydrolase (EPHX1) gene, complete cds
1340	14088	26784	13.91	7.0E-08	X04809.1	NT	ANKYRIN 1 (ERYTHROCYTE ANKYRIN)
3563	16318	28965	1.15	7.0E-08	PI5305	SWISSPROT	Rat mRNA for ribosomal protein L31
							DYNEIN HEAVY CHAIN (DYHC)

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3563	16318	28966	1.15	7.0E-08	P15305	SWISSPROT	DYNEIN HEAVY CHAIN (DYHC)
10716	23405		1.67	7.0E-08	AI535743.1	EST_HUMAN	comp3.P11.A5 contig Homo sapiens cDNA 3'
11672	24267	37589	5.17	7.0E-08	U24070.1	NT	Rattus norvegicus Munc13-1 mRNA, complete cds
12619	16318	28965	2.98	7.0E-08	P15305	SWISSPROT	DYNEIN HEAVY CHAIN (DYHC)
12619	16318	28966	2.98	7.0E-08	P15305	SWISSPROT	DYNEIN HEAVY CHAIN (DYHC)
12690	24975		1.89	7.0E-08	AJ131016.1	NT	Homo sapiens SCL gene locus
798	13570	28230	2.88	6.0E-08	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C048
798	13570	28231	2.88	6.0E-08	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C048
2363	15085	27824	2.97	8.0E-08	BE144368.1	EST_HUMAN	MR0-HT0168-191199-004-g09 HT0168 Homo sapiens cDNA
3058	15924	28469	0.81	6.0E-08	7662473	NT	Homo sapiens KIAA1074 protein (KIAA1074), mRNA
4222	16963	29588	0.98	6.0E-08	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C048
7851	20546		0.89	6.0E-08	P08547	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
9227	21906		0.56	6.0E-08	AA827075.1	EST_HUMAN	cds56c05.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1335368 3' similar to contains MER12.b3 MER12 repetitive element ;
11391	23997	37289	2.24	6.0E-08	P11369	SWISSPROT	RETROVIRUS-RELATED POLYPROTEIN [CONTAINS: REVERSE TRANSCRIPTASE ; ENDONUCLEASE]
11520	24120		1.33	6.0E-08	AL163208.2	NT	Homo sapiens chromosome 21 segment HS21C008
83	12909	28547	3.72	5.0E-08	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
2229	14957	27697	1.82	5.0E-08	AA493851.1	EST_HUMAN	ht03b09.s1 NCI_CGAP_Thy1 Homo sapiens cDNA clone IMAGE:943193 similar to contains Alu repetitive element;
11914	24477		8.36	5.0E-08	P06681	SWISSPROT	COMPLEMENT C2 PRECURSOR (C3/C5 CONVERTASE)
12009	24509	31085	2.64	5.0E-08	AW861878.1	EST_HUMAN	QV0-CT0225-131099-034-s12 CT0225 Homo sapiens cDNA
1754	14496	27185	0.97	4.0E-08	P25723	SWISSPROT	DORSAL-VENTRAL PATTERNING TOLLID PROTEIN PRECURSOR
1754	14496	27195	0.97	4.0E-08	P25723	SWISSPROT	DORSAL-VENTRAL PATTERNING TOLLID PROTEIN PRECURSOR
2888	15955		1.09	4.0E-08	AL076581.1	EST_HUMAN	DKFZp43J0428_r1 434 (synonym: hhes) Homo sapiens cDNA clone DKFZp43J0428 5'
3894	16844	28284	1.04	4.0E-08	U82868.1	NT	Homo sapiens shox gene, alternatively spliced products, complete cds
6311	19082	32067	1.08	4.0E-08	P52824	SWISSPROT	URIDINE PHOSPHORYLASE (UDRPASE)
9697	21389	34533	0.63	4.0E-08	OT5393	SWISSPROT	TRANSMEMBRANE PROTEASE, SERINE 2
9037	21727	34881	1.05	4.0E-08	L42571.1	NT	Cricetulus griseus ribosomal transcription factor (UBF2) mRNA, complete cds
9545	22198		0.71	4.0E-08	P08547	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
10228	22876		0.68	4.0E-08	AI016342.1	EST_HUMAN	ct78d12.s1 Soares_tet1_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:1622803 3'
10284	22932	36147	3.87	4.0E-08	AI050027.1	EST_HUMAN	en22d10.x1 Gessler Wilms tumor Homo sapiens cDNA clone IMAGE:1698411 3' similar to contains Alu repetitive element; contains element MER22 repetitive element ;

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11009	23681	36839	1.71	4.0E-08	AA363627.1	EST_HUMAN	z176508.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:728247 5' similar to TR:G505579 G505579 NAVCA,K-EXCHANGER ;
11009	23681	36840	1.71	4.0E-08	AA363627.1	EST_HUMAN	z176508.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:728247 5' similar to TR:G505579 G505579 NAVCA,K-EXCHANGER ;
11031	23702	36869	4.02	4.0E-08	BF692493.1	EST_HUMAN	602249024F1 NIH_MGC_62 Homo sapiens cDNA clone IMAGE:4333300 5'
11031	23702	36870	4.02	4.0E-08	BF692493.1	EST_HUMAN	602249024F1 NIH_MGC_62 Homo sapiens cDNA clone IMAGE:4333300 5'
11919	25334		4.31	4.0E-08	W76159.1	EST_HUMAN	z165503.r1 Soares_fetal_heart_NH-H19W Homo sapiens cDNA clone IMAGE:345556 5' similar to contains L1.1 L1 repetitive element;
12549	24887		2.18	4.0E-08	A1349353.1	EST_HUMAN	ib95e11.x1 NCL_CGAP_Co16 Homo sapiens cDNA clone IMAGE:2062078 3' similar to contains MER18.b3 MER18 repetitive element;
5523	18321	31222	2.22	3.0E-08	BE018348.1	EST_HUMAN	b579a10.y1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3048570 5' similar to TR:Q92158 Q92158 SYNTAXIN 17 ;
6879	17955	30552	4.24	3.0E-08	A1792737.1	EST_HUMAN	q576f11.y6 NCL_CGAP_P128 Homo sapiens cDNA clone IMAGE:1944045 5'
7439	20116	33205	1.66	3.0E-08	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
7649	20313		3.56	3.0E-08	A1436352.1	EST_HUMAN	th63h09.x1 Soares_NSF_F8_gw_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:2126273 3' similar to TR:Q19537 Q19537 MER37 TRANSPOSABLE ELEMENT, COMPLETE CONSENSUS SEQUENCE ;
9798	22449		0.52	3.0E-08	AF045006.1	NT	Homo sapiens MHC class 1 region
10948	23626	36877	1.32	3.0E-08	A1218001.1	EST_HUMAN	q121a04.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1846294 3'
11566	24165	37477	61.58	3.0E-08	R66279.1	EST_HUMAN	yp12b10.s1 Soares_breast_3NB-Hst Homo sapiens cDNA clone IMAGE:187195 3' similar to gb:M34079 TAT: BINDING PROTEIN-1 (HUMAN);
11566	24165	37478	61.58	3.0E-08	R66279.1	EST_HUMAN	yp12b10.s1 Soares_breast_3NB-Hst Homo sapiens cDNA clone IMAGE:187195 3' similar to gb:M34079 TAT: BINDING PROTEIN-1 (HUMAN);
11888	24459		2.27	3.0E-08	R18420.1	EST_HUMAN	y102R04.r1 Soares_infant_brain_1N1B Homo sapiens cDNA clone IMAGE:30948 5' similar to contains Alu repetitive element;
201	13014		9.03	2.0E-08	AW302998.1	EST_HUMAN	xr87f08.x1 NCL_CGAP_Lu28 Homo sapiens cDNA clone IMAGE:2767139 3'
221	13033		9.14	2.0E-08	AA425598.1	EST_HUMAN	zw48f07.r1 Soares_total_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:773317 5' similar to contains Alu repetitive element;contains element MER15 repetitive element ;
484	13269	25905	1.01	2.0E-08	AF198349.1	NT	Gallus gallus Dach2 protein (Dach2) mRNA, complete cds
645	13424	26062	13.62	2.0E-08	AW886438.1	EST_HUMAN	MRO-OT0080-240200-001-g08 OT0080 Homo sapiens cDNA
645	13424	26063	13.62	2.0E-08	AW886438.1	EST_HUMAN	MRO-OT0080-240200-001-g08 OT0080 Homo sapiens cDNA
989	13735		24.4	2.0E-08	BE280477.1	EST_HUMAN	601156321F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3138863 5'
1320	14069	26743	2.36	2.0E-08	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
1734	14476		12.18	2.0E-08	BE734871.1	EST_HUMAN	601570463F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3845189 5'



Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1847	14585		4.11	2.0E-08	AW270271.1	EST_HUMAN	xp43f1.1x1 NCI_CGAP_HN11 Homo sapiens cDNA clone IMAGE:2743149 3'
2545	15260		1.71	2.0E-08	K00216.1	NT	Sheep His-IRNA-GUG
3202	15985	28618	7.94	2.0E-08	O42280	SWISSPROT	WNT-14 PROTEIN PRECURSOR
3202	15985	28619	7.94	2.0E-08	O42280	SWISSPROT	WNT-14 PROTEIN PRECURSOR
3840	16591		1.76	2.0E-08	AW813620.1	EST_HUMAN	RC3-ST0197-161089-012-303 ST0197 Homo sapiens cDNA
4373	17111		2.48	2.0E-08	AA458040.1	EST_HUMAN	aa28c07.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:814380 5' similar to contains L1.2 L1 repetitive element ;
4903	17630		2.36	2.0E-08	AW572881.1	EST_HUMAN	he17r08.x2 NCI_CGAP_CML1 Homo sapiens cDNA clone IMAGE:2919327 3' similar to contains Alu repetitive element ;
5549	18346	31255	1.19	2.0E-08	AA813204.1	EST_HUMAN	ai80h11.s1 Soares_besla_NHT Homo sapiens cDNA clone 1377189 3'
5742	18534	31457	0.93	2.0E-08	AW089824.1	EST_HUMAN	xd32c04.x1 NCI_CGAP_Ov23 Homo sapiens cDNA clone IMAGE:2895462 3' similar to contains MER18.b3
7903	20598	33728	0.92	2.0E-08	P10272	SWISSPROT	MER18 MER18 repetitive element ;
8009	20704	33832	1.35	2.0E-08	AA490121.1	EST_HUMAN	POL POLYPROTEIN [CONTAINS: PROTEASE; REVERSE TRANSCRIPTASE; ENDONUCLEASE]
8983	21673		0.9	2.0E-08	AU139978.1	EST_HUMAN	ab02g08.s1 Strategene fetal retina 937202 Homo sapiens cDNA clone PLACE1011719 5'
10416	23062	36281	0.79	2.0E-08	N78097.1	EST_HUMAN	AU139978 PLACE1 Homo sapiens cDNA clone PLACE1011719 5'
10416	23062	36282	0.79	2.0E-08	N78097.1	EST_HUMAN	W72802.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:248283 5' similar to contains LTR1.b3 LTR1 repetitive element ;
12184	24666		1.54	2.0E-08	AL163284.2	NT	W72802.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:248283 5' similar to contains LTR1.b3 LTR1 repetitive element ;
1499	15571	26831	1.16	1.0E-08	P31792	SWISSPROT	Homo sapiens chromosome 21 segment HS21C084
1768	14510	27211	1.45	1.0E-08	AF125348.1	NT	POL POLYPROTEIN [CONTAINS: REVERSE TRANSCRIPTASE; ENDONUCLEASE]
2044	14777		2.31	1.0E-08	BE141959.1	EST_HUMAN	Homo sapiens caveolin 1 (CAV1) gene, exon 3 and partial cds
5512	18310	31211	4.85	1.0E-08	AJ010770.1	NT	PM2-HT0130-150099-001-r12 HT0130 Homo sapiens cDNA
7668	20332	33443	1.26	1.0E-08	P19474	SWISSPROT	Homo sapiens hyperion gene, exons 1-50
7634	20629	33756	0.52	1.0E-08	AL163302.2	NT	52 KD RO PROTEIN (SLOGREN SYNDROME TYPE A ANTIGEN (SS-A)) (RO(SS-A))
8028	20723	33855	0.64	1.0E-08	AF224699.1	NT	Homo sapiens chromosome 21 segment HS21C102
8028	20723	33856	0.64	1.0E-08	AF224699.1	NT	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
8445	21137	34276	1.94	1.0E-08	AI015304.1	EST_HUMAN	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
9104	21792		0.45	1.0E-08	P09563	SWISSPROT	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
9105	21793	34956	0.78	1.0E-08	BE072572.1	EST_HUMAN	alpha5a05.s1 Soares_besla_NHT Homo sapiens cDNA clone IMAGE:1618736 3'
							S-ANTIGEN PROTEIN PRECURSOR
							PM2-BT0546-210100-004-402 BT0546 Homo sapiens cDNA

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9886	22516	35712	1.2	1.0E-08	P79110	SWISSPROT	TRICARBOXYLATE TRANSPORT PROTEIN PRECURSOR (CITRATE TRANSPORT PROTEIN) (CTP)
10453	23069	36330	0.77	1.0E-08	P98063	SWISSPROT	(TRICARBOXYLATE CARRIER PROTEIN)
11285	23946	37241	4.14	1.0E-08	AF044083.1	NT	BONE MORPHOGENETIC PROTEIN 1 PRECURSOR (BMP-1)
12282	24715		2.82	1.0E-08	X51765.1	NT	Homo sapiens major histocompatibility locus class III region
4218	16959	29583	4.65	9.0E-09	AL163279.2	NT	Human lambda-immunoglobulin constant region complex (germline)
4218	16959	29584	4.65	9.0E-09	AL163279.2	NT	Homo sapiens chromosome 21 segment HS21C079
9882	22610		0.52	9.0E-09	T97950.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C079
8390	19159		0.62	8.0E-09	AI270615.1	EST_HUMAN	ye58a12.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:121918 3'
7164	19851	32920	7.66	8.0E-09	AI183500.1	EST_HUMAN	qu86c11.x1 NCJ_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:1978964 3' similar to contains L1.13 L1 repetitive element;
7899	20594	33728	2.65	8.0E-09	AW900159.1	EST_HUMAN	qd42a07.x1 Soares_fetal_heart_NBHH19W Homo sapiens cDNA clone IMAGE:1732164 3' similar to contains MSR1.11 MSR1 repetitive element;
8887	21578		2.65	8.0E-09	AA938892.1	EST_HUMAN	CM0-NN1004-100300-273-e08 NN1004 Homo sapiens cDNA
3583	18346		1.73	7.0E-09	D88842.1	NT	op74d08.s1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1582575 3'
7802	20497		0.81	7.0E-09	BF108755.1	EST_HUMAN	Homo sapiens DNA for 3-ketoad-CoA thiolase beta-subunit of mitochondrial trifunctional protein, exon 2, 3
7948	20841		0.82	7.0E-09	AA256200.1	EST_HUMAN	745e10.x1 Soares_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3524443 3' similar to contains MER29.b2 MER29 repetitive element;
9159	21829	34983	2.91	7.0E-09	L09709.1	NT	z60c05.r1 Soares_NHIMPu_S1 Homo sapiens cDNA clone IMAGE:881992 5' similar to contains L1.12 L1 repetitive element;
10083	22731	35946	1.42	7.0E-09	BE254850.1	EST_HUMAN	Human lysosomal membrane glycoprotein-2 (LAMP2) gene, 5' end and flanking region
10244	22862		0.5	7.0E-09	AA058626.1	EST_HUMAN	60111173F1 NIH_MGC_18 Homo sapiens cDNA clone IMAGE:3351834 5'
10571	23286		1.49	7.0E-09	T97950.1	EST_HUMAN	z558a07.s1 Soares retina N2b4HR Homo sapiens cDNA clone IMAGE:381156 3' similar to contains L1.12 L1 repetitive element;
2149	14879		0.90	6.0E-09	AL040439.1	EST_HUMAN	ye58a12.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:121918 3'
4922	17660	30283	3.12	6.0E-09	BE186421.1	EST_HUMAN	DKF7p434C0514_r1 434 (synonym: hlec3) Homo sapiens cDNA clone DKF7p434C0514 5'
5298	18101	30700	11.59	6.0E-09	AW195784.1	EST_HUMAN	PM1-HIT0527-160200-001-p05 HIT0527 Homo sapiens cDNA
8475	21167	34311	0.93	6.0E-09	BE181663.1	EST_HUMAN	xn85h08.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2701311 3'
9074	21763	34925	1.96	6.0E-09	4503710	NT	MR3-HT0448-280300-201-H12 HT0448 Homo sapiens cDNA
10176	22824		3.76	6.0E-09	AF200923.2	NT	Homo sapiens fibroblast growth factor receptor 3 (echinodermless, thanatophoro dwarfism) (FGFR3) mRNA
10632	23324	36561	1.44	6.0E-09	BF108755.1	EST_HUMAN	Homo sapiens testis-specific kinase subunit (TSKS) gene, complete cds 745e10.x1 Soares_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3524443 3' similar to contains MER29.b2 MER29 repetitive element;

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11798	24388	37722	1.37	8.0E-09	C01803.1	EST_HUMAN	HUMGS0003762 Human adult (K. Okubo) Homo sapiens cDNA
1394	14141	26818	3.27	5.0E-09	BE149284.1	EST_HUMAN	RC2-HT0252-120200-014-h10 HT0252 Homo sapiens cDNA
1845	14583	27298	1.06	5.0E-09	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
6318	19087	32071	1.73	5.0E-09	AA369454.1	EST_HUMAN	EST68740 Fetal lung II Homo sapiens cDNA 5' end
6748	17917	30581	0.76	5.0E-09	U66059.1	NT	Human germline T-cell receptor beta chain Dopamine-beta-hydroxylase-like, TRY1, TRY2, TRY3, TCRBV27S1P, TCRBV22S1A2N1T, TCRBV6S1A1T, TCRBV7S1A1N2T, TCRBV6S1A1T, TCRBV13S3, TCRBV6S7P, TCRBV7S3A2T, TCRBV13S2A1T, TCRBV6S2A2PT, TCRBV7S2A1N4T, TCRBV13S9V13S>
8484	21176	34321	0.48	5.0E-09	P37071	SWISSPROT	OLFACTORY RECEPTOR-LIKE PROTEIN COR5
9895	22843	35855	2.22	5.0E-09	AW790667.1	EST_HUMAN	PM2-UM0053-240300-005-c08 UM0053 Homo sapiens cDNA
508	13292		2.12	4.0E-09	AL163282.2	NT	Homo sapiens chromosome 21 segment HS21C082
944	13710		2.5	4.0E-09	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
1463	14200	26884	2.82	4.0E-09	9558718	NT	Homo sapiens hypothetical protein (AF038169), mRNA
2019	14751	27478	2.31	4.0E-09	AF175325.1	NT	Homo sapiens eukaryotic initiation factor 4A1 (EIF4A1) gene, partial cds
2018	14751	27480	2.31	4.0E-09	AF175325.1	NT	Homo sapiens eukaryotic initiation factor 4A1 (EIF4A1) gene, partial cds
2430	16161	27885	6.07	4.0E-09	AA350878.1	EST_HUMAN	EST168385 Infant brain Homo sapiens cDNA 5' and similar to similar to heat shock protein, 90 kDa
7746	20442	33565	0.59	4.0E-09	AA405747.1	EST_HUMAN	z040408.r1 Soares_NIHMPu_S1 Homo sapiens cDNA clone IMAGE:768298 5'
8420	21113	34250	0.62	4.0E-09	T84942.1	EST_HUMAN	y011a07.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:66804 3'
10779	23482	36704	2.06	4.0E-09	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
11011	23683	36943	1.47	4.0E-09	A1886401.1	EST_HUMAN	wm84f10.x1 NCI_CGAP_U12 Homo sapiens cDNA clone IMAGE:2443627 3'
11081	23731		1.53	4.0E-09	AA195142.1	EST_HUMAN	z34412.r1 Soares_NIHMPu_S1 Homo sapiens cDNA clone IMAGE:665278 5' similar to gb.L07807 DYNAMIN-1 (HUMAN);
2351	15073	27810	4.77	3.0E-09	BE222239.1	EST_HUMAN	hu09e09.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3166120 3' similar to contains MER18.13
2557	15271	28006	1.2	3.0E-09	BE222239.1	EST_HUMAN	MER18 repetitive element;
2656	15396	28104	1.13	3.0E-09	P23249	EST_HUMAN	hu09e09.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3166120 3' similar to contains MER18.13
3323	16088	28733	1.12	3.0E-09	BE222239.1	SWISSPROT	PROTEIN MOV-10
3371	16130		1.08	3.0E-09	AA442272.1	EST_HUMAN	hu09e09.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3166120 3' similar to contains MER18.13
4078	16820		0.7	3.0E-09	X16874.1	EST_HUMAN	MER18 repetitive element;
4392	17128	29761	3.42	3.0E-09	AF175325.1	NT	z054004.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:757422 5'
4478	17211	28836	1.65	3.0E-09	Q9Y3R6	SWISSPROT	H.sapiens PADPPP-1 gene for NAD(+) ADP-ribosyltransferase
						NT	Homo sapiens eukaryotic initiation factor 4A1 (EIF4A1) gene, partial cds
						SWISSPROT	258.1 KDA PROTEIN C21ORF5 (KIA06933)

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7800	20406	33617	1.19	3.0E-09	BE465780.1	EST_HUMAN	hs60a02.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3194090 3' similar to TR:055091
10147	22706	38009	1.7	3.0E-09	AL183247.2	NT	O55091 IMPACT PROTEIN.;
10845	23624	38873	4.8	3.0E-09	BF108943.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C047
10845	23624	38874	4.8	3.0E-09	BF108943.1	EST_HUMAN	717208.x1 Soares_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3527030 3'
794	13566		2.43	2.0E-09	X18674.1	NT	717208.x1 Soares_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3527030 3'
1235	13984	28653	7.99	2.0E-09	AL183284.2	NT	H.sapiens PADPRP-I gene for NAD(+) ADP-ribosyltransferase
1655	14401		7.46	2.0E-09	AL118573.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C084
2326	15051	27787	1.1	2.0E-09	Q9Y3R5	SWISSPROT	DKFZp761B1710.1 761 (synonym: hamy2) Homo sapiens cDNA clone DKFZp761B1710 5'
3916	16866	28306	3.01	2.0E-09	O60241	SWISSPROT	258.1 KDA PROTEIN C21ORF5 (KIAA0833)
5076	17795	30411	0.85	2.0E-09	M23161.1	NT	BRAIN-SPECIFIC ANGIOGENESIS INHIBITOR 2 PRECURSOR
5633	18428	31341	0.55	2.0E-09	A004062.1	EST_HUMAN	Human transposon-like element mRNA
6058	18838		0.57	2.0E-09	AL163249.2	NT	cd47b09.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1619897 3'
6682	18589		0.93	2.0E-09	AA357407.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C049
7351	20032	33110	8.4	2.0E-09	AA461430.1	EST_HUMAN	EST66142 Kidney IX Homo sapiens cDNA 5' end similar to EST containing L1 repeat
7423	20100	33188	0.68	2.0E-09	W28834.1	EST_HUMAN	z63h06.r1 Soares_tot_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:798187 5' similar to contains Alu repetitive element;
7717	20381	33494	0.62	2.0E-09	AW862126.1	EST_HUMAN	52d11 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA
8812	21304	34447	1.78	2.0E-09	AL271735.1	NT	MR1-CT0352-240200-105-508 CT0352 Homo sapiens cDNA
11233	23806	37183	1.62	2.0E-09	AL163249.2	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
12428	13506		22.07	2.0E-09	X18674.1	NT	Homo sapiens chromosome 21 segment HS21C048
12495	25403		2.41	2.0E-09	AA228070.1	EST_HUMAN	H.sapiens PADPRP-I gene for NAD(+) ADP-ribosyltransferase
12634	24934		1.75	2.0E-09	U82668.1	NT	nc11c02.r1 NCL_CGAP_PT1 Homo sapiens cDNA clone IMAGE:1007810 similar to contains Alu repetitive element;
974	13739		0.72	1.0E-09	W78182.1	EST_HUMAN	Homo sapiens shox gene, alternatively spliced products, complete cds
1087	13945	26503	2.01	1.0E-09	5031624	NT	z679d03.s1 Soares_fetal_heart_Nb1H19W Homo sapiens cDNA clone IMAGE:346853 3' similar to gb:U02832 PEROXISOME PROLIFERATOR ACTIVATED RECEPTOR ALPHA (HUMAN);
1087	13945	26504	2.01	1.0E-09	5031624	NT	Homo sapiens CCAAT-box-binding transcription factor (CBF2) mRNA
1630	14376		1.17	1.0E-09	AJ229041.1	NT	Homo sapiens CCAAT-box-binding transcription factor (CBF2) mRNA
2892	15959	28304	1.59	1.0E-09	U80017.1	NT	Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22; segment 1/3
2926	15992	28336	3.25	1.0E-09	M28690.1	NT	Homo sapiens basic transcription factor 2 p44 (btf2p44) gene, partial cds, neuronal apoptosis inhibitory protein (nailp) and survival motor neuron protein (smn) genes, complete cds
2926	15992	28337	3.25	1.0E-09	M28690.1	NT	Homo sapiens nuclear phosphoprotein B23 (NPM1) mRNA, complete cds
3034	15900	28446	0.7	1.0E-09	BE535440.1	EST_HUMAN	Homo sapiens nuclear phosphoprotein B23 (NPM1) mRNA, complete cds 601058602F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3445177 5'

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4744	17476		6.4	1.0E-09	AA719297.1	EST_HUMAN	z135603.s1 Source_pituitary_gland_N3HPG Homo sapiens cDNA clone IMAGE:414029 3' similar to contains
5416	18215	30323	0.66	1.0E-09	AL163283.2	NT	Alu repetitive element; contains element MER22 repetitive element;
5740	18632	31455	1.89	1.0E-09	U07000.1	NT	Homo sapiens chromosome 21 segment HS21C083
6053	18633	31795	3.13	1.0E-09	P26894	SWISSPROT	Human breakpoint cluster region (BCR) gene, complete cds
8289	20983	34124	0.85	1.0E-09	AB88474.1	EST_HUMAN	CIRCUMSPORZOITE PROTEIN PRECURSOR (CS)
10212	22860		2.92	1.0E-09	AL163283.2	NT	wd3605.x1 Scores_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2330481 3' similar to contains
11789	24389		1.68	1.0E-09	AL163283.2	NT	MER25.11 MER25 repetitive element;
12333	25344	30717	2.25	1.0E-09	11418127	NT	Homo sapiens chromosome 21 segment HS21C083
12603	24857		1.36	1.0E-09	T83178.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C083
1286	14036	26707	3.74	9.0E-10	AW887740.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C083
							Homo sapiens GTP binding protein 1 (GTPBP1), mRNA
							ye24605.t1 Strabagene lung (#837210) Homo sapiens cDNA clone IMAGE:118688 5'
							MRO-SN0040-050500-002-c07 SN0040 Homo sapiens cDNA
2838	15606	28258	4.41	9.0E-10	AB70071.1	EST_HUMAN	we78h03.x1 Scores_Deckgraeffe_cdon_NHCD Homo sapiens cDNA clone IMAGE:2347253 3' similar to
							SW:RL29_HUMAN P47914 90S RIBOSOMAL PROTEIN L29 ;contains element PTR5 repetitive element ;
							t146b09.x1 Scores_NSF_FB_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:2144537 3' similar to
							TR:000372 000372 PUTATIVE P150. ;
6735	18669	32801	4.78	9.0E-10	AA62982.1	EST_HUMAN	Homo sapiens MCMA (MCMA) and DNA-PKcs (PRKDC) genes, partial cds
142	12957	25569	13.27	8.0E-10	U83630.2	NT	QV1-BT0631-150200-071-01 BT0631 Homo sapiens cDNA
3337	18097	28748	0.88	8.0E-10	BE080748.1	EST_HUMAN	EST186584 Small intestine   Homo sapiens cDNA 5' end
4177	18917	28544	3.17	8.0E-10	AA378832.1	EST_HUMAN	Homo sapiens lens major intrinsic protein (MIP) gene, complete cds
9865	22515		2.44	8.0E-10	U36308.2	NT	Homo sapiens TPA inducible protein (LOC51586), mRNA
685	13460	26107	9.36	7.0E-10	7706225	NT	Homo sapiens TPA inducible protein (LOC51586), mRNA
685	13480	26108	9.36	7.0E-10	7706225	NT	Homo sapiens TPA inducible protein (LOC51586), mRNA
1618	14366	27055	2.24	7.0E-10	Q13342	SWISSPROT	LYSP-100 PROTEIN (LYMPHOID-RESTRICTED HOMOLOG OF SP-100)
2013	14748		3.17	7.0E-10	P08548	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
2564	15278		24.23	7.0E-10	P08547	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
3085	16950	28491	2.19	7.0E-10	X00656.1	NT	H. sapiens DHFR gene, exon 3
6092	18870	31838	4.18	7.0E-10	AA345220.1	EST_HUMAN	EST51247 Gall bladder II Homo sapiens cDNA 5' end
7316	19999	33078	1.08	7.0E-10	BF352883.1	EST_HUMAN	IL3-HT0619-110700-209-D12 HT0619 Homo sapiens cDNA
7568	20228		1.48	7.0E-10	P36084	SWISSPROT	DNA-DIRECTED RNA POLYMERASE II LARGEST SUBUNIT
7875	20570	33696	1.6	7.0E-10	AF028701.2	NT	Homo sapiens presentin-1 gene, exons 1 and 2
7875	20570	33697	1.6	7.0E-10	AF028701.2	NT	Homo sapiens presentin-1 gene, exons 1 and 2
10209	22857	36073	1.67	7.0E-10	L08865.1	NT	Homo sapiens MAD5MEF2-family transcription factor (MEF2C) mRNA, complete cds

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
893	13662	26327	3.5	6.0E-10	AJ400877.1	NT	Homo sapiens ASCL3 gene, CEGP1 gene, C11orf14 gene, C11orf15 gene, C11orf16 gene and C11orf17 gene
2684	15363	28132	1.21	6.0E-10	A142405.1	EST_HUMAN	U02407.x1 NCI_CGAP_P28 Homo sapiens cDNA clone IMAGE:2085021 3'
4689	17423		2.7	6.0E-10	AW653719.1	EST_HUMAN	RC3-OT0254-031089-012-g12 CT0254 Homo sapiens cDNA
8082	21374	34518	1	6.0E-10	P33730	SWISSPROT	E-SELECTIN PRECURSOR (ENDOTHELIAL LEUKOCYTE ADHESION MOLECULE 1) (ELAM-1) (LEUKOCYTE-ENDOTHELIAL CELL ADHESION MOLECULE 2) (LECAM2) (CD62E)
8082	21374	34519	1	6.0E-10	P33730	SWISSPROT	E-SELECTIN PRECURSOR (ENDOTHELIAL LEUKOCYTE ADHESION MOLECULE 1) (ELAM-1) (LEUKOCYTE-ENDOTHELIAL CELL ADHESION MOLECULE 2) (LECAM2) (CD62E)
9334	22187	35373	0.46	6.0E-10	P98073	SWISSPROT	ENTEROPEPTIDASE PRECURSOR (ENTEROKINASE)
11050	24503		2.16	6.0E-10	AW971923.1	EST_HUMAN	EST384012 MAG2 resequences, MAGL Homo sapiens cDNA
745	13518		7.27	5.0E-10	AL046804.1	EST_HUMAN	DKFZ434N219_j1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZ434N219 5'
3468	16224	28878	2.5	5.0E-10	Q01033	SWISSPROT	HYPOTHETICAL GENE 48 PROTEIN
4831	17659	30289	1	5.0E-10	AF181897.1	NT	Homo sapiens WRN (WRN) gene, complete cds
7222	19907		1.51	5.0E-10	BF105159.1	EST_HUMAN	U01822184F1 NIH_MGC_75 Homo sapiens cDNA clone IMAGE:4042413 5'
9436	22114	35288	1.89	5.0E-10	P34678	SWISSPROT	HYPOTHETICAL 67.9 KD PROTEIN ZK688.8 IN CHROMOSOME III
9436	22114	35289	1.89	5.0E-10	P34678	SWISSPROT	HYPOTHETICAL 67.9 KD PROTEIN ZK688.8 IN CHROMOSOME III
109	12930		1.17	4.0E-10	A1221083.1	EST_HUMAN	cg09108.x1 Soares placenta_8to9weeks_2Nbl-P81c0W Homo sapiens cDNA clone IMAGE:1758048 3'
567	13348	25076	0.74	4.0E-10	AA516280.1	EST_HUMAN	similar to contains LTR8.b2 LTR8 repetitive element ;
1989	14725	27446	1.31	4.0E-10	AW594709.1	EST_HUMAN	hg58g03.x1 NCI_CGAP_C03 Homo sapiens cDNA clone IMAGE:324848 3'
2580	15294	28032	3.73	4.0E-10	AL163303.2	NT	repetitive element
7076	19797	32831	25.71	4.0E-10	AF224909.1	NT	Homo sapiens chromosome 21 segment HS21C103
10085	22743	35957	0.49	4.0E-10	AW293243.1	EST_HUMAN	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
10343	22990	36208	0.89	4.0E-10	A1267342.1	EST_HUMAN	UIH-B12-ah1-a-07-0-UI.s1 NCI_CGAP_Sub4 Homo sapiens cDNA clone IMAGE:2727061 3'
895	13663	26329	3.55	3.0E-10	N36113.1	EST_HUMAN	seq3h11.x1 Stanley Frontal SN pod 2 Homo sapiens cDNA clone IMAGE:2035653
1329	14078		4.72	3.0E-10	A7005150.1	NT	y92706.s1 Soares melanocyte 2Nbl-HM Homo sapiens cDNA clone IMAGE:272963 3' similar to contains L1.11 L1 repetitive element ;
4468	17234	29664	1.04	3.0E-10	AL163203.2	NT	Homo sapiens extracellular glycoprotein lactoferrin precursor, gene, complete cds
4468	17234	29665	1.04	3.0E-10	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
5368	18169	30855	1.24	3.0E-10	N60109.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C003
6110	18957	31656	2.52	3.0E-10	P20380	SWISSPROT	yz11g08.s1 Soares multiple sclerosis 2Nbl-HMSP Homo sapiens cDNA clone IMAGE:282782 3'
6258	19032	32007	3.43	3.0E-10	BE302870.1	EST_HUMAN	RHOMBOLD PROTEIN (VEINLET PROTEIN)

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7690	20324	33432	1.42	3.0E-10	AV743302.1	EST_HUMAN	AV743302 CB Homo sapiens cDNA clone CBFBGD08 5'
7690	20324	33433	1.42	3.0E-10	AV743302.1	EST_HUMAN	AV743302 CB Homo sapiens cDNA clone CBFBGD08 5'
8629	21321	34463	1.2	3.0E-10	H87208.1	EST_HUMAN	ya74b12.e1 Soares retina N2b4HR Homo sapiens cDNA clone IMAGE:220511 3' similar to contains MER29 repetitive element;
8947	21638	34784	1.58	3.0E-10	AW850731.1	EST_HUMAN	IL3-CT0219-160200-064-B08 CT0219 Homo sapiens cDNA
8947	21638	34785	1.58	3.0E-10	AW850731.1	EST_HUMAN	IL3-CT0219-160200-064-B08 CT0219 Homo sapiens cDNA
9240	21919		0.58	3.0E-10	AF020503.1	NT	Homo sapiens FRA3B common fragile region, diadenosine triphosphate hydrolase (FHIT) gene, exon 5
10359	23008		2.37	3.0E-10	T65891.1	EST_HUMAN	yc11e12.r1 Strategene lung (#837210) Homo sapiens cDNA clone IMAGE:80398 5'
10493	23139		1.34	3.0E-10	AA789294.1	EST_HUMAN	nc28603.e1 NCI CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1288908 3'
12884	24907	31003	2.65	3.0E-10	BE179517.1	EST_HUMAN	IL3-HT0818-110500-136-E07 HT0818 Homo sapiens cDNA
34	12882	25479	1.67	2.0E-10	P48988	SWISSPROT	MAJOR CENTROMERE AUTOANTIGEN B (CENTROMERE PROTEIN B) (CENP-B)
34	12882	25480	1.67	2.0E-10	P48988	SWISSPROT	MAJOR CENTROMERE AUTOANTIGEN B (CENTROMERE PROTEIN B) (CENP-B)
1890	14827		1.96	2.0E-10	U80017.1	NT	Homo sapiens basic transcription factor 2 p44 (btf2p44) gene, partial cds, neuronal apoptosis inhibitory protein (nrip) and survival motor neuron protein (smn) genes, complete cds
2085	15751		1.04	2.0E-10	BF675047.1	EST_HUMAN	602136640F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4273377 5'
5714	18507		2.54	2.0E-10	Q28640	SWISSPROT	(HPRG)
6156	18933	31900	1.37	2.0E-10	AF280107.1	NT	Homo sapiens cytochrome P450 polypeptide 43 (CYP3A43) gene, partial cds; cytochrome P450 polypeptide 4 (CYP3A4) and cytochrome P450 polypeptide 7 (CYP3A7) genes, complete cds; and cytochrome P450 polypeptide 5 (CYP3A5) gene, partial cds
7279	19983	33039	6.47	2.0E-10	BE791082.1	EST_HUMAN	807586208F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3940824 5'
7912	20807	33737	0.48	2.0E-10	P26809	SWISSPROT	POL POLYPROTEIN [CONTAINS: PROTEASE; REVERSE TRANSCRIPTASE; RIBONUCLEASE H]
7912	20807	33738	0.48	2.0E-10	P26809	SWISSPROT	POL POLYPROTEIN [CONTAINS: PROTEASE; REVERSE TRANSCRIPTASE; RIBONUCLEASE H]
9202	21871		0.99	2.0E-10	BF434586.1	EST_HUMAN	7a78d08.x1 NCI CGAP_Kid1 Homo sapiens cDNA clone IMAGE:3842303 3' similar to contains L1.13 L1 repetitive element;
11207	23058		1.37	2.0E-10	AI882153.1	EST_HUMAN	br10f12.x1 Soares_tad_fetus_Nb2HF8 9w Homo sapiens cDNA clone IMAGE:2043665 3'
1498	14245		1.87	1.0E-10	AW867767.1	EST_HUMAN	MRO-SN0038-280300-001-01 SN0038 Homo sapiens cDNA
1602	14348	27037	3.18	1.0E-10	AV652123.1	EST_HUMAN	AV652123 GLC Homo sapiens cDNA clone GLCXA11 3'
2586	15300		3.16	1.0E-10	AW652001.1	EST_HUMAN	QV0-CT0225-161199-058-008 CT0225 Homo sapiens cDNA
3491	16247	28901	0.89	1.0E-10	AW832912.1	EST_HUMAN	QV2-TT0003-161199-013-g10 TT0003 Homo sapiens cDNA
3528	16284		0.7	1.0E-10	AL041695.1	EST_HUMAN	DKFZp434N1317_j1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434N1317 5'
3825	16284		1.03	1.0E-10	AL041695.1	EST_HUMAN	DKFZp434N1317_j1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434N1317 5'
3896	16744		0.19	1.0E-10	AF213894.1	NT	Homo sapiens nuclear factor of kappa light polypeptide gene enhancer in B-cells 1 (NFKB1) gene, complete cds

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Table 4  
Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4108	16851	29477	5.1	1.0E-10	U52111.2	NT	Homo sapiens X28 region near ALD locus containing dual specificity phosphatase 9 (DUSP9), ribosomal protein L18a (RPL18a), Ca2+/Calmodulin-dependent protein kinase I (CAMKI), creatine transporter (CRTR), CDM protein (CDM), adrenoleukodystrophy protein >
4108	16851	29478	5.1	1.0E-10	U52111.2	NT	Homo sapiens X28 region near ALD locus containing dual specificity phosphatase 9 (DUSP9), ribosomal protein L18a (RPL18a), Ca2+/Calmodulin-dependent protein kinase I (CAMKI), creatine transporter (CRTR), CDM protein (CDM), adrenoleukodystrophy protein >
4113	16858	29484	1.94	1.0E-10	AB031080.1	NT	Homo sapiens PCCX1 mRNA for protein containing CXXC domain 1, complete cds
4149	16891		1.84	1.0E-10	M30629.1	NT	Human pregnancy-specific glycoprotein beta-1 (SP1) mRNA, last exon
5085	17804		1.51	1.0E-10	A1797745.1	EST_HUMAN	web2104.x1 Scores_NFL_I_GBC_S1 Homo sapiens cDNA clone IMAGE:2347615 3' similar to contains MER31.1 MER31 repetitive element;
6720	19035	32678	0.66	1.0E-10	AF003528.1	NT	Homo sapiens X-linked arylidic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
7376	20055		0.65	1.0E-10	P08548	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
7583	20251	33357	0.55	1.0E-10	AU128584.1	EST_HUMAN	AU128584 NT2RP2 Homo sapiens cDNA clone NT2RP2003751 5'
8138	20832	33968	1.04	1.0E-10	AW408990.1	EST_HUMAN	fb_044 Fetal brain library Homo sapiens cDNA
8553	21245		1.07	1.0E-10	A1268340.1	EST_HUMAN	qm04e10.x1 NCI_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1890874 3' similar to contains L1.1 L1 repetitive element;
10102	22750		4.01	1.0E-10	AA081898.1	EST_HUMAN	zn23g06.r1 Stratagene neuroepithelium NT2RAM1 937234 Homo sapiens cDNA clone IMAGE:548314 5'
10831	23513	36754	2.85	1.0E-10	AI038280.1	EST_HUMAN	cy65f03.x1 Scores_fetal_liver_spleen_INFLS_S1 Homo sapiens cDNA clone IMAGE:1872661 3'
11896	17913		1.71	1.0E-10	X87344.1	NT	H. sapiens DMA, DMB, HLA-Z1, IPP2, LMP2, TAP1, LMP7, TAP2, DOB, DOB2 and RING8, 9, 13 and 14 genes
255	13063	25702	1.59	9.0E-11	BE145600.1	EST_HUMAN	HL2-HT0203-281099-018-c08 HT0203 Homo sapiens cDNA
2097	14828	27561	6.12	9.0E-11	AL134395.1	EST_HUMAN	DKFZp547D225_r1 547 (synonym: hibr1) Homo sapiens cDNA clone DKFZp547D225 5'
2097	14828	27562	6.12	9.0E-11	AL134395.1	EST_HUMAN	DKFZp547D225_r1 547 (synonym: hibr1) Homo sapiens cDNA clone DKFZp547D225 5'
3378	16137	28706	2.45	9.0E-11	AL134395.1	EST_HUMAN	DKFZp547D225_r1 547 (synonym: hibr1) Homo sapiens cDNA clone DKFZp547D225 5'
3378	16137	28706	2.45	9.0E-11	AL134395.1	EST_HUMAN	DKFZp547D225_r1 547 (synonym: hibr1) Homo sapiens cDNA clone DKFZp547D225 5'
4465	17201	29827	1.03	9.0E-11	AA775985.1	EST_HUMAN	ae7801.s1 Stratagene schizo brain S11 Homo sapiens cDNA clone IMAGE:970297 3'
5487	18286		3.83	9.0E-11	BE079780.1	EST_HUMAN	RC8-BT0627-140200-011-E06 BT0627 Homo sapiens cDNA
10054	22702	35919	1.19	9.0E-11	AA324960.1	EST_HUMAN	EST27872 Cerebellum II Homo sapiens cDNA 5' end
10054	22702	35920	1.19	9.0E-11	AA324960.1	EST_HUMAN	EST27872 Cerebellum II Homo sapiens cDNA 5' end
12258	24703	31080	3.9	9.0E-11	C16635.1	EST_HUMAN	C16635 Clontech human aorta polyA+ mRNA (#5572) Homo sapiens cDNA clone GEN-506B08 5'
3114	15879		8.33	8.0E-11	H19871.1	EST_HUMAN	yn5311.1.s1 Scores adult brain N256HB55Y Homo sapiens cDNA clone IMAGE:172173 3' similar to contains L1 repetitive element;



Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3945	16606	29334	0.7	8.0E-11	AF478617.1	EST_HUMAN	hm54c00.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2161836 3'
4022	16768	29398	4.88	8.0E-11	N23712.1	EST_HUMAN	yw49e06.s1 Wistar-Kyoto Rat Epithelial Homo sapiens cDNA clone IMAGE:285298 3'
6674	19338		0.65	8.0E-11	AW168158.1	EST_HUMAN	x45h11.x1 NCI_CGAP_Bm50 Homo sapiens cDNA clone IMAGE:2621081 3' similar to contains MER10.H
1430	14177	26862	1.75	7.0E-11	AA330842.1	EST_HUMAN	MER10 repetitive element;
							EST34392 Embryo, 6 week   Homo sapiens cDNA 5' end
3852	16802	29240	1.03	7.0E-11	AJ277548.2	NT	Homo sapiens WEE1 gene for protein kinase and partial ZNF143 gene for zinc finger transcription factor
8396	21089	34224	2.05	7.0E-11	AF163864.1	NT	Homo sapiens SNCA isoform (SNCA) gene, complete cds, alternatively spliced
10129	22777		1.17	7.0E-11	P11399	SWISSPROT	RETROVIRUS-RELATED POLYPROTEIN [CONTAINS: REVERSE TRANSCRIPTASE ; ENDONUCLEASE]
403	13188	26837	7.01	6.0E-11	M55270.1	NT	Human matrix Gla protein (MGP) gene, complete cds
403	13188	26838	7.01	6.0E-11	M55270.1	NT	Human matrix Gla protein (MGP) gene, complete cds
6622	16884	32398	0.87	6.0E-11	L44140.1	NT	Homo sapiens chromosome X region from filamin (FLN) gene to glucose-6-phosphate dehydrogenase (G6PD) gene, complete cds
7593	20261	33369	3.65	6.0E-11	P08547	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
8262	20956	34095	7.81	6.0E-11	AV727859.1	EST_HUMAN	AV727859 HTC Homo sapiens cDNA clone HTCCAS008 5'
9213	21892	36059	0.62	6.0E-11	BE063600.1	EST_HUMAN	CMO-BT0281-031199-087-403 BT0281 Homo sapiens cDNA
11	12838	25451	1.48	5.0E-11	AL163283.2	NT	Homo sapiens chromosome 21 segment HS21C083
3359	12838	25451	1.9	5.0E-11	AL163283.2	NT	Homo sapiens chromosome 21 segment HS21C083
4203	16944	29671	1.36	6.0E-11	P48034	SWISSPROT	ALDEHYDE OXIDASE
6423	19191	32187	1.63	6.0E-11	AL163213.2	NT	Homo sapiens chromosome 21 segment HS21C013
7430	20707	33194	14.05	5.0E-11	11416709	NT	Homo sapiens protodactherin beta 3 (PCDH3), mRNA
1380	14127		1.94	4.0E-11	AA438042.1	EST_HUMAN	zu01b12.f1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:730659 5'
2793	15498	29238	7.14	4.0E-11	BE889000.1	EST_HUMAN	801507531F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3609295 5'
2869	15735	29385	1.16	4.0E-11	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
4576	17311	29039	0.85	4.0E-11	ID44896.1	EST_HUMAN	HUMSUPY069 Human brain cDNA Homo sapiens cDNA clone 069
6384	19153	32153	3.2	4.0E-11	P20095	SWISSPROT	PRE-MRNA SPLICING FACTOR RNA HELICASE PRP2
6903	10641	32686	0.82	4.0E-11	AA442630.1	EST_HUMAN	zu09f10.f1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:757903 5' similar to TRG1055250 G1055250 PHEROMONE RECEPTOR VN4.;
7274	19958		4.5	4.0E-11	AF224096.1	NT	Homo sapiens mannose-6-phosphate isomerase (MAN6A) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
9295	21962		1.79	4.0E-11	BE149425.1	EST_HUMAN	RC1-HT0256-210100-013-008 HT0256 Homo sapiens cDNA
9562	22215	35402	0.9	4.0E-11	AI009753.1	EST_HUMAN	fb2g12.x1 NCI_CGAP_Bm23 Homo sapiens cDNA clone IMAGE:2105830 3' similar to WP-ZK353.1 CE00395;

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12462	24830	31029	1.47	4.0E-11	11545732	NT	Homo sapiens SH3-domain binding protein 1 (SH3BP1), mRNA
1475	14222	26908	2.6	3.0E-11	6679077	NT	Mus musculus expressed in non-metastatic cells 2, protein (NM23B) (Nme2), mRNA
4243	16984		1.04	3.0E-11	AA309248.1	EST_HUMAN	EST180120 Liver, hepatocellular carcinoma Homo sapiens cDNA 5' end
940	13707	26372	1.97	2.0E-11	AH150502.1	EST_HUMAN	q3604.x1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1752102 3' similar to contains MER10.13
1162	13016	26380	3.99	2.0E-11	R24807.1	EST_HUMAN	MER10 repetitive element
1162	13918	26381	3.99	2.0E-11	R24807.1	EST_HUMAN	y943e12.1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:35144 5'
1608	14354	27042	4.86	2.0E-11	L17432.1	NT	y943e12.1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:35144 5'
1608	14354	27043	4.86	2.0E-11	L17432.1	NT	Gallus gallus rho-globin, beta-H globin, beta-A globin, epsilon-globin, and olfactory receptor-like protein
							COR3beta (COR3beta) genes, complete cds
							Gallus gallus rho-globin, beta-H globin, beta-A globin, epsilon-globin, and olfactory receptor-like protein
							COR3beta (COR3beta) genes, complete cds
1612	14359	27048	1.21	2.0E-11	AH126371.1	EST_HUMAN	q551c10.x1 Soares pregnant uterus_NbHPU Homo sapiens cDNA clone IMAGE:1713138 3' similar to
3191	15654	26607	7.58	2.0E-11	P10283	SWISSPROT	gb:U02832 PEROXISOME PROLIFERATOR ACTIVATED RECEPTOR ALPHA (HUMAN); contains L1.11
3320	18080	26730	1.11	2.0E-11	A478617.1	EST_HUMAN	L1 repetitive element
							RETROVIRUS-RELATED GAG POLYPROTEIN (VERSION 1)
							hm64c09.x1 NCJ_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2161836 3'
3356	16116	26771	0.93	2.0E-11	Q10473	SWISSPROT	POLYPEPTIDE N-ACETYL GALACTOSAMINYL TRANSFERASE (PROTEIN UDP
							ACETYL GALACTOSAMINYL TRANSFERASE) (UDP-GALNAc:POLYPEPTIDE, N-
							ACETYL GALACTOSAMINYL TRANSFERASE) (GALNAc-T1)
3488	16244		1.01	2.0E-11	AF020503.1	NT	Homo sapiens FRA3B common fragile region, disordered triphosphate hydrolase (FHIT) gene, exon 5
4409	17148		0.88	2.0E-11	BE065537.1	EST_HUMAN	RC3-BT0316-170200-014-e05 BT0316 Homo sapiens cDNA
4587	17302		0.72	2.0E-11	AL163227.2	NT	Homo sapiens chromosome 21 segment HS21C027
4882	17609		1.77	2.0E-11	BE062558.1	EST_HUMAN	QV2-BT0258-261099-014-e01 BT0258 Homo sapiens cDNA
8044	18824	31785	1.02	2.0E-11	AW877806.1	EST_HUMAN	QV2-P70073-280300-109-h08 PT0073 Homo sapiens cDNA
8216	18982	31968	1.87	2.0E-11	AA581028.1	EST_HUMAN	nc83h05.1 NCJ_CGAP_GC1 Homo sapiens cDNA clone IMAGE:797433 5' similar to SW:PR16_YEAST
7095	19784	32850	0.89	2.0E-11	BF592945.1	EST_HUMAN	P15938 PRE-MRNA SPLICING FACTOR RNA HELICASE PRP16.
7782	20477		0.66	2.0E-11	P37072	SWISSPROT	797693.x1 NCJ_CGAP_GC8 Homo sapiens cDNA clone IMAGE:3442565 3'
							OLFACTORY RECEPTOR-LIKE PROTEIN COR6
9123	21811		1.14	2.0E-11	AF028308.1	NT	Homo sapiens chromosome 9 duplication of the T cell receptor beta locus and trypsinogen gene families
10184	22832	36048	5.44	2.0E-11	Q13608	SWISSPROT	OLFACTORY RECEPTOR 51 (OLFACTORY RECEPTOR-LIKE PROTEIN OLF1)
10413	23059	36277	1.12	2.0E-11	AW885874.1	EST_HUMAN	RC4-OT0072-170400-013-e11 OT0072 Homo sapiens cDNA
10413	23059	36278	1.12	2.0E-11	AW885874.1	EST_HUMAN	RC4-OT0072-170400-013-e11 OT0072 Homo sapiens cDNA

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11056	23726	36887	1.48	2.0E-11	AA035398.1	EST_HUMAN	zK27g02.s1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:471794 3'
11056	23726	36886	1.48	2.0E-11	AA035398.1	EST_HUMAN	zK27g02.s1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:471794 3'
11090	23760	37035	1.57	2.0E-11	AA281956.1	EST_HUMAN	zs18b04.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:685519 5'
12017	26332		1.54	2.0E-11	AA704195.1	EST_HUMAN	z77e03.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:460924 3'
12048	24567		3.54	2.0E-11	AW842143.1	EST_HUMAN	RC0-CN0027-210100-011-c01 CN0027 Homo sapiens cDNA
12073	24586	31123	1.87	2.0E-11	BF377859.1	EST_HUMAN	CM2-TN0140-070900-372-g01 TN0140 Homo sapiens cDNA
12332	24748		2.67	2.0E-11	D26217.2	NT	Homo sapiens mRNA for KIAA0027 protein, partial cds
12479	24840		3.14	2.0E-11	P08547	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
12781	26035		3.37	2.0E-11	11417868	NT	Homo sapiens SEC14 (S. cerevisiae)-like 2 (SEC14L2), mRNA
661	13437	26078	1.34	1.0E-11	AJ131018.1	NT	Homo sapiens SQL gene locus
1195	13947	26811	3.35	1.0E-11	AL163279.2	NT	Homo sapiens chromosome 21 segment HS21C079
1485	14232		2.36	1.0E-11	AF119814.1	NT	Homo sapiens PRO3078 mRNA, complete cds
2030	14765	27494	1.13	1.0E-11	P18268	SWISSPROT	OXYSTEROL-BINDING PROTEIN
2122	14853	27592	2.91	1.0E-11	AF000573.1	NT	Homo sapiens homogenisate 1,2-dioxygenase gene, complete cds
3490	16246	28900	1.2	1.0E-11	BE004315.1	EST_HUMAN	CM0-BN0105-170300-282-412 BN0105 Homo sapiens cDNA
5249	18055	30883	15.93	1.0E-11	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
5741	18533	31456	0.63	1.0E-11	BF222846.1	EST_HUMAN	7p57d01.X1 NCI_CGAP_P128 Homo sapiens cDNA clone IMAGE:3649845 3' similar to contains MER10.b3
8101	20795	33928	3.15	1.0E-11	4885548	NT	MER10 repetitive element ;
8480	21172	34317	5.44	1.0E-11	R13174.1	EST_HUMAN	Homo sapiens PHD finger protein 2 (PHF2) mRNA
8946	21637	34782	1.89	1.0E-11	BF365119.1	EST_HUMAN	y73d08.r1 Soares Infant brain 1N1B Homo sapiens cDNA clone IMAGE:28196 5'
8946	21637	34783	1.89	1.0E-11	BF365119.1	EST_HUMAN	QV4-NIN1149-250900-423-c03 NIN1149 Homo sapiens cDNA
11267	23919	37212	1.62	1.0E-11	BF680078.1	EST_HUMAN	QV4-NIN1149-250900-423-c03 NIN1149 Homo sapiens cDNA
9697	22346	35542	1.07	9.0E-12	AL163300.2	NT	602164807F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4285977 5'
9697	22348	35543	1.07	9.0E-12	AL163300.2	NT	Homo sapiens chromosome 21 segment HS21C100
9237	21916		0.93	8.0E-12	BE074720.1	EST_HUMAN	IL6-BT0578-130300-036-G12 BT0578 Homo sapiens cDNA
12125	24617		3.91	8.0E-12	AJ271736.1	NT	Homo sapiens Xq pseudautosomal region; segment 2/2
4613	17348	29862	1.16	7.0E-12	Q05804	SWISSPROT	34 KD SPICULE MATRIX PROTEIN PRECURSOR (LSM34)
11322	24013	37316	9.69	7.0E-12	AA704736.1	EST_HUMAN	z23g01.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:451162 3'
3535	16291		0.71	6.0E-12	AV730554.1	EST_HUMAN	AV730554 HTF Homo sapiens cDNA clone HTFAWF08 5'
4314	17053	29878	8.62	6.0E-12	AA732516.1	EST_HUMAN	nz88f11.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1302573 3' similar to contains Alu repetitive element;
6295	19068	32051	0.77	6.0E-12	AF020503.1	NT	Homo sapiens FRA3B common fragile region, diadenosine triphosphate hydrolase (FHT) gene, exon 5

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8894	21586	34723	1.04	6.0E-12	AF003249.1	NT	Morone saxatilis myosin heavy chain FM3A (FM3A) mRNA, complete cds
9374	21949		1.67	6.0E-12	AA847898.1	EST_HUMAN	cd10g11.s1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1367588 similar to contains MER28.12
1020	13780	28442	3.52	5.0E-12	T06573.1	EST_HUMAN	MER29 repetitive element;
3385	16144	28801	1.61	5.0E-12	BE047778.1	EST_HUMAN	EST04482 Fetal brain, Strategene (cd1036206) Homo sapiens cDNA clone HFBDV33
3713	16466	29104	5.03	5.0E-12	AJ271736.1	NT	tz42h05.y1 NCL_CGAP_Bim52 Homo sapiens cDNA clone IMAGE:2291217 5'
5631	18715	31671	6.41	5.0E-12	AL163278.2	NT	Homo sapiens Xq pseudautosomal region; segment 2/2
5631	18715	31672	6.41	5.0E-12	AL163278.2	NT	Homo sapiens chromosome 21 segment HS21C078
6399	19168	32167	11.33	5.0E-12	AW974760.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C078
8033	19424	32439	0.94	5.0E-12	AL040739.1	EST_HUMAN	EST388950 IMAGE resequences, MAGN Homo sapiens cDNA
8042	19424	32439	1.16	5.0E-12	AL040739.1	EST_HUMAN	DKFZp434B1816.s1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434B1815 3'
8128	20822	33959	1.33	5.0E-12	AA033745.1	EST_HUMAN	DKFZp434B1816.s1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434B1815 3'
8686	21268		0.55	5.0E-12	AW867037.1	EST_HUMAN	z01g12.s1 Soares_fetal_heart_NbH19W Homo sapiens cDNA clone IMAGE:375718 3' similar to contains L1.13 L1 repetitive element;
8893	21584		0.54	5.0E-12	AL079681.1	EST_HUMAN	RC1-OT0086-220300-011-507 OT0086 Homo sapiens cDNA
9006	21896	34847	2.93	5.0E-12	AJ271735.1	NT	DKFZp434J0426.r1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434J0426 5'
9323	21990	35161	0.96	5.0E-12	P34982	SWISSPROT	Homo sapiens Xq pseudautosomal region; segment 1/2
10175	22823		4.45	5.0E-12	AL163303.2	NT	OLFACTORY RECEPTOR 1D2 (OLFACTORY RECEPTOR-LIKE PROTEIN HGMP07E) (OLFACTORY RECEPTOR 17-4) (OR17-4)
10262	22910	36120	0.78	5.0E-12	AL163302.2	NT	Homo sapiens chromosome 21 segment HS21C103
10468	23114	36344	0.44	5.0E-12	6978754	NT	Homo sapiens chromosome 21 segment HS21C102
237	13047	25688	4.2	4.0E-12	AA700328.1	EST_HUMAN	Rattus norvegicus Deleted in colorectal cancer (rat homolog) (Doc), mRNA
238	13047	25688	4.03	4.0E-12	AA700328.1	EST_HUMAN	z74g11.s1 Soares_fetal_liver_spleen_INFLS_S1 Homo sapiens cDNA clone IMAGE:460876 3'
4577	17312	29940	0.8	4.0E-12	A1689894.1	EST_HUMAN	z74g11.s1 Soares_fetal_liver_spleen_INFLS_S1 Homo sapiens cDNA clone IMAGE:460876 3'
7519	20190		0.72	4.0E-12	BF445140.1	EST_HUMAN	b22h05.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:2270745 3' similar to TR:Q13539 Q13539 MARINER TRANSPOSASE.;
8141	20835		3.2	4.0E-12	AF109907.1	NT	ned21b03.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3366077 3' similar to contains MER7.b2
8587	21279	34418	0.87	4.0E-12	AB042815.1	NT	MER7 repetitive element;
11019	23691	36954	4.2	4.0E-12	AJ228043.1	NT	Homo sapiens S164 gene, partial cds; PS1 and hypothetical protein genes, complete cds; and S171 gene, partial cds
12375	24774		2.76	4.0E-12	U78027.1	NT	Bos taurus Mch2 mRNA for mitochondrial carrier homolog 2, complete cds
							Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22, segment 3/3
							Homo sapiens Bruton's tyrosine kinase (BTK), alpha-D-galactosidase A (GLA), L44-like ribosomal protein (L44L) and FTP3 (FTP3) genes, complete cds

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
602	13380	28011	4.27	3.0E-12	AW341883.1	EST_HUMAN	h13d01.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2808377 3' similar to TR:O14517 O14517 SMRP.;
602	13380	28012	4.27	3.0E-12	AW341883.1	EST_HUMAN	h13d01.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2808377 3' similar to TR:O14517 O14517 SMRP.;
5084	17803	30421	0.81	3.0E-12	AL163288.2	NT	Homo sapiens chromosome 21 segment HS21C088
5365	18167	30853	1.52	3.0E-12	AF111188.2	NT	Homo sapiens serine palmitoyl transferase, subunit II gene, complete cds; and unknown genes
7854	20318		0.63	3.0E-12	AW854328.1	EST_HUMAN	RC3-CT0255-031098-011-h02 CT0255 Homo sapiens cDNA
8273	20697	34109	0.51	3.0E-12	C05453	SWISSPROT	SERINE PROTEASE HEPSIN
9004	21094	34844	0.52	3.0E-12	C05453	SWISSPROT	SERINE PROTEASE HEPSIN
10551	23247	38483	3.03	3.0E-12	U37672.1	NT	Human prostate specific antigen gene, 5' flanking region
10551	23247	38484	3.03	3.0E-12	U37672.1	NT	Human prostate specific antigen gene, 5' flanking region
1049	14395	27084	1.39	2.0E-12	AW802431.1	EST_HUMAN	IL5-UM0071-120400-065-a05 UM0071 Homo sapiens cDNA
4094	18838	29462	0.91	2.0E-12	J01884.1	NT	Rat USA small nuclear RNA
4094	18838	29463	0.91	2.0E-12	J01884.1	NT	Rat USA small nuclear RNA
4387	17124		2.03	2.0E-12	BE069509.1	EST_HUMAN	CM0-BT0281-031199-087-a03 BT0281 Homo sapiens cDNA
4840	17570	30192	1.18	2.0E-12	O70306	SWISSPROT	TBX15 PROTEIN (T-BOX PROTEIN 15)
4840	17570	30193	1.18	2.0E-12	O70306	SWISSPROT	TBX15 PROTEIN (T-BOX PROTEIN 15)
5169	17978	30491	0.77	2.0E-12	P11369	SWISSPROT	RETROVIRUS-RELATED POLYPROTEIN [CONTAINS: REVERSE TRANSCRIPTASE ; ENDONUCLEASE]
6385	19154		2.8	2.0E-12	AW871857.1	EST_HUMAN	EST383948 IMAGE sequences, MAGL Homo sapiens cDNA
7075	19788	32830	3.74	2.0E-12	T08189.1	EST_HUMAN	EST06080 Infant Brain, Banto Soares Homo sapiens cDNA clone HIBBA13 5' and
7244	19929	33005	1.02	2.0E-12	BE173035.1	EST_HUMAN	MR0-HT0559-200400-015-a08 HT0559 Homo sapiens cDNA
7558	20228	33331	2.2	2.0E-12	11422228	NT	Homo sapiens Ac-like transposable element (ALTE), mRNA
9208	22087		1.84	2.0E-12	AF196864.1	NT	Homo sapiens putative BIPES syndrome breakpoint region protein gene, complete cds
9885	22535		11.12	2.0E-12	BE166880.1	EST_HUMAN	MR3-HT0487-150200-113-g01 HT0487 Homo sapiens cDNA
10412	23058	36276	0.87	2.0E-12	A1334130.1	EST_HUMAN	qq0702.x1 Soares_NHMPu_S1 Homo sapiens cDNA clone IMAGE:1931835 3' similar to TR:Q13538
12032	24557		2.81	2.0E-12	AL163283.2	NT	Q13538 ORF2: FUNCTION UNKNOWN.;
12223	24680		2.5	2.0E-12	11418248	NT	Homo sapiens chromosome 21 segment HS21C083
119	12838	25579	2.21	1.0E-12	AW627674.1	EST_HUMAN	Homo sapiens sulfotransferase-related protein (SULTX3), mRNA
1680	14716		1.39	1.0E-12	A1871728.1	EST_HUMAN	h190a09.x1 NCI_CGAP_GU1 Homo sapiens cDNA clone IMAGE:2870040 3' similar to contains MER18.11
3057	15833	28476	1.29	1.0E-12	AF000991.1	EST_HUMAN	MER18 repetitive element; wm6107.x1 NCI_CGAP_U12 Homo sapiens cDNA clone IMAGE:2439493 3' similar to contains L1.B3 L1 repetitive element; Homo sapiens testis-specific Testis Transcript Y 2 (TTY2) mRNA, partial cds

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3067	15633	28477	1.29	1.0E-12	AF000891.1	NT	Homo sapiens testis-specific Testis Transcript Y 2 (TTY2) mRNA, partial cds
3855	16005	29242	28.43	1.0E-12	AU132248.1	EST_HUMAN	AU132248 NT2RP3 Homo sapiens cDNA clone NT2RP3004070 5'
3855	16005	29243	28.43	1.0E-12	AU132248.1	EST_HUMAN	AU132248 NT2RP3 Homo sapiens cDNA clone NT2RP3004070 5'
5877	16063		2.25	1.0E-12	U82828.1	NT	Homo sapiens ataxia telangiectasia (ATM) gene, complete cds
5950	16732		1.93	1.0E-12	Q9Y2G7	SWISSPROT	HYPOTHETICAL ZINC FINGER PROTEIN KIAA0661
6438	19208	32202	0.82	1.0E-12	AF229843.1	NT	Mus musculus WNT-2 gene, partial cds; putative ankyrin-related protein and cystic fibrosis transmembrane conductance regulator (CFTR) genes, section 1 of 2 of the complete cds; and unknown gene
7016	19708	32764	2.07	1.0E-12	AF198894.1	NT	Homo sapiens putative BPES syndrome breakpoint region protein gene, complete cds
7050	19741	32802	11.32	1.0E-12	AJ248533.1	EST_HUMAN	gb:M19503 LINE-1 REVERSE TRANSCRIPTASE HOMOLOG (HUMAN); contains MER10.t1 MER10 repetitive element;
7050	19741	32803	11.32	1.0E-12	AJ248533.1	EST_HUMAN	gb:M19503 LINE-1 REVERSE TRANSCRIPTASE HOMOLOG (HUMAN); contains MER10.t1 MER10 repetitive element;
8606	21298	34442	1.16	1.0E-12	AA752323.1	EST_HUMAN	sc28405.s1 Strategene ovary (#837217) Homo sapiens cDNA clone IMAGE:857577 3'
11273	23834		1.72	1.0E-12	AW469478.1	EST_HUMAN	he38f07.x1 NCL CGAP_CML1 Homo sapiens cDNA clone IMAGE:2921317 3' similar to contains element LTR3 repetitive element;
11942	24497	37809	4.54	1.0E-12	AW082164.1	EST_HUMAN	EST374237 MAGE sequences, MAGG Homo sapiens cDNA
12150	24637		1.82	1.0E-12	AJ735582.1	EST_HUMAN	wk31008.x1 NCL CGAP_Co16 Homo sapiens cDNA clone IMAGE:2392085 3'
12294	25308		2.92	1.0E-12	AL163268.2	NT	Homo sapiens chromosome 21 segment HS21C068
3618	16371		1	9.0E-13	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
3927	16877	28320	0.96	9.0E-13	AB029800.1	NT	Homo sapiens CST gene for carbonyl sulfide sulfoxidase, exon 1, 2, 3, 4, 5
9501	22154		2.67	9.0E-13	N68953.1	EST_HUMAN	za28b06.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:283651 3'
700	13475	28123	7.37	8.0E-13	U29186.1	NT	Homo sapiens prion protein (PrP) gene, complete cds
700	13475	28124	7.37	8.0E-13	U29185.1	NT	Homo sapiens prion protein (PrP) gene, complete cds
1830	14569	27281	2.94	8.0E-13	U80017.1	NT	Homo sapiens basic transcription factor 2 p44 (btf2p44) gene, partial cds, neuronal apoptosis inhibitory protein (nrip) and survival motor neuron protein (smn) genes, complete cds
8011	20708	33834	0.78	8.0E-13	AJ884396.1	EST_HUMAN	wm311009.x1 NCL CGAP_UH4 Homo sapiens cDNA clone IMAGE:2437801 3'
8011	20706	33835	0.78	8.0E-13	AJ884396.1	EST_HUMAN	wm311009.x1 NCL CGAP_UH4 Homo sapiens cDNA clone IMAGE:2437801 3'
10048	22894		3.08	8.0E-13	U78027.1	NT	Homo sapiens Bruton's tyrosine kinase (BTK), alpha-D-galactosidase A (GLA), L44-like ribosomal protein (L44L) and FTP3 (FTP3) genes, complete cds

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11779	24370	37701	1.87	8.0E-13	U66060.1	NT	Human germline T-cell receptor beta chain TCRBV13S1, TCRBV6S8A2T, TCRBV5S6A3N2T, TCRBV13S6A2T, TCRBV6S9P, TCRBV6S3A2T, TCRBV13S8P, TCRBV6S3A1N1T, TCRBV5S2, TCRBV6S6A2T, TCRBV5S7P, TCRBV13S4, TCRBV6S2A1N1T, TCRBV6S4A2T, TCRBV6S4A1, TCRBV23S1A2T, TCRBV12
7718	20382	33485	0.71	7.0E-13	A1884398.1	EST_HUMAN	wm31h09.x1 NCI CGAP_U44 Homo sapiens cDNA clone IMAGE:2437601 3'
7718	20382	33498	0.71	7.0E-13	A1884398.1	EST_HUMAN	wm31h09.x1 NCI CGAP_U44 Homo sapiens cDNA clone IMAGE:2437601 3'
8133	20827		0.66	7.0E-13	Q95155	SWISSPROT	OLFACTORY RECEPTOR-LIKE PROTEIN OLF2
12404	24788		3.05	7.0E-13	BE778223.1	EST_HUMAN	B01463285F1 NH_MGC_67 Homo sapiens cDNA clone IMAGE:3806613 5'
12817	24923		1.37	7.0E-13	Q10473	SWISSPROT	POLYPEPTIDE N-ACETYL GALACTOSAMINYL TRANSFERASE (PROTEIN-UDP ACETYL GALACTOSAMINYL TRANSFERASE) (UDP-GALNAc:POLYPEPTIDE, N-ACETYL GALACTOSAMINYL TRANSFERASE) (GALNAc-T1)
2094	14825	27558	0.76	6.0E-13	AL163207.2	NT	Homo sapiens chromosome 21 segment HS21C007
3316	16078		0.74	5.0E-13	R78338.1	EST_HUMAN	y8204.T Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:145760 5'
3392	16151		1.54	5.0E-13	AA435773.1	EST_HUMAN	z177a12.a1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:728350 3' similar to contains Alu repetitive element; contains element MER22 repetitive element;
6777	19521	32548	0.84	5.0E-13	P08983	SWISSPROT	GAP JUNCTION BETA-1 PROTEIN (CONNEXIN 30) (CX30)
10767	23451	36693	2.72	5.0E-13	P07913	SWISSPROT	MYOSIN LIGHT CHAIN KINASE, SKELETAL MUSCLE (MLCK)
1880	14598		2.23	4.0E-13	AW378814.1	EST_HUMAN	PM2-HT0224-221089-001-e11 HT0224 Homo sapiens cDNA
2462	15180		1.67	4.0E-13	AF003529.1	NT	Homo sapiens glycocalyx 3 (GPC3) gene, partial cds and flanking repeat regions
5499	18287	31195	6.51	4.0E-13	BE189131.1	EST_HUMAN	PM3-HT0520-230200-002-c08 HT0520 Homo sapiens cDNA
7105	19793	32858	1.05	4.0E-13	AB037750.1	NT	Homo sapiens mRNA for KIAA1329 protein, partial cds
7512	20183	33277	0.94	4.0E-13	AA431628.1	EST_HUMAN	zw78g12.r1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:782182 5' similar to TR:G452763 G452763 COR1 MRNA ;
7620	20286		1.07	4.0E-13	N44291.1	EST_HUMAN	y33g05.r1 Soares melanocyte 2Nb1M Homo sapiens cDNA clone IMAGE:273080 5' similar to PIR:A32895 A32895 t complex sterility protein - mouse ;
8740	21432	34577	1.07	4.0E-13	AL043810.1	EST_HUMAN	DKFZp434A0128_r1_434 (synonym: htec3) Homo sapiens cDNA clone DKFZp434A0128 5'
9402	22064	35235	0.45	4.0E-13	AA076907.1	EST_HUMAN	7804H11 Chromosome 7 Fetal Brain cDNA Library Homo sapiens cDNA clone 7B04H11
9819	22568	35764	4.94	4.0E-13	A1289831.1	EST_HUMAN	q32405.x1 NCI CGAP_Kid5 Homo sapiens cDNA clone IMAGE:188945 3' similar to contains Alu repetitive element
11120	23789	37069	2.09	4.0E-13	AA436816.1	EST_HUMAN	z178g10.a1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:728614 3'
11120	23789	37067	2.09	4.0E-13	AA435819.1	EST_HUMAN	z178g10.a1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:728514 3'
175	12987		4.94	3.0E-13	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
845	13915		1.62	3.0E-13	AA430310.1	EST_HUMAN	zv68g08.r1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:781406 5'

# Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2370	15082	27831	1.26	3.0E-13	AJ271738.1	NT	Homo sapiens Xq pseudosubclonal region; segment 2/2
2483	15201		2.47	3.0E-13	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
2699	15379	28117	2.91	3.0E-13	BF372982.1	EST_HUMAN	CNM3-F0100-140700-242-h08 F0100 Homo sapiens cDNA
3182	15945		2.97	3.0E-13	AA745844.1	EST_HUMAN	cb18d02.s1 NCI_CGAP_Kid5 Homo sapiens cDNA clone IMAGE:1324035 3'
5452	18251	31140	0.59	3.0E-13	AA134017.1	EST_HUMAN	zn88h10.r1 Stragene lung carcinoma 837218 Homo sapiens cDNA clone IMAGE:565315 5' similar to contains THR 12 THR repetitive element ;
5452	18251	31141	0.59	3.0E-13	AA134017.1	EST_HUMAN	zn88h10.r1 Stragene lung carcinoma 837218 Homo sapiens cDNA clone IMAGE:565315 5' similar to contains THR 12 THR repetitive element ;
5902	18887	31635	0.62	3.0E-13	AW005939.1	EST_HUMAN	wz88c02.x1 NCI_CGAP_Brn25 Homo sapiens cDNA clone IMAGE:2565890 3' similar to TR:O75139 O75139 KIAA0844 PROTEIN. ;
7783	20478	33603	7.67	3.0E-13	U62111.2	NT	Homo sapiens X28 region near ALD locus containing dual specificity phosphatase 9 (DUSP9), ribosomal protein L18a (RPL18a), Ca <sup>2+</sup> /Calmodulin-dependent protein kinase I (CAMKI), creatine transporter (CRTR), CDM protein (CDM), echinodermectyrophy protein >
7975	20670	33782	0.6	3.0E-13	AA352487.1	EST_HUMAN	EST60487 Activated T-cells XX Homo sapiens cDNA 5' end similar to similar to serine protease P100, Rα-reactive factor
7975	20670	33783	0.6	3.0E-13	AA352487.1	EST_HUMAN	EST60487 Activated T-cells XX Homo sapiens cDNA 5' end similar to similar to serine protease P100, Rα-reactive factor
10098	22746	35981	0.72	3.0E-13	AW835487.1	EST_HUMAN	RC2-DT0007-110100-014-g10 DT0007 Homo sapiens cDNA
10575	23270		3.61	3.0E-13	A084798.1	EST_HUMAN	HA0536 Human fetal liver cDNA library Homo sapiens cDNA
10975	23651	36604	3.08	3.0E-13	BE063502.1	EST_HUMAN	CNM-BT0281-031198-087-e03 BT0281 Homo sapiens cDNA
11598	24197	37517	2.29	3.0E-13	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C048
145	12960	25602	3.42	2.0E-13	U62111.2	NT	Homo sapiens X28 region near ALD locus containing dual specificity phosphatase 9 (DUSP9), ribosomal protein L18a (RPL18a), Ca <sup>2+</sup> /Calmodulin-dependent protein kinase I (CAMKI), creatine transporter (CRTR), CDM protein (CDM), echinodermectyrophy protein >
232	13043	25683	2.06	2.0E-13	U33839.1	NT	Danilo rerio fibroblast growth factor receptor 4 mRNA, complete cds
1247	13998	29863	7.99	2.0E-13	AF239710.1	NT	Homo sapiens DNA polymerase delta small subunit (POLD2) gene, exons 1 through 11 and complete cds
3005	15771	28419	0.9	2.0E-13	8824119	NT	Homo sapiens hypothetical protein PRO2130 (PRO2130), mRNA
3005	15771	28420	0.9	2.0E-13	8824119	NT	Homo sapiens hypothetical protein PRO2130 (PRO2130), mRNA
3275	16036	28886	1.13	2.0E-13	BF431899.1	EST_HUMAN	nab7605.x1 Soares_NSF_F8_gw_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE: 3'
3498	16254	28908	1.11	2.0E-13	AF109807.1	NT	Homo sapiens S184 gene, partial cds; PS1 and hypothetical protein genes, complete cds; and S171 gene, partial cds
4088	16831		1.34	2.0E-13	AI163278.2	NT	Homo sapiens chromosome 21 segment HS21C078



Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6032	18812	31772	4.7	2.0E-13	Q08852	SWISSPROT	CELL SURFACE GLYCOPROTEIN 1 PRECURSOR (OUTER LAYER PROTEIN B) (S-LAYER PROTEIN 1)
6113	18890		0.88	2.0E-13	X79412.1	NT	S. scrofa rps12 mRNA for ribosomal protein S12
6717	19632	32675	7.15	2.0E-13	X10912.1	NT	Human PFKL gene for liver-type 6-phosphofructokinase (EC 2.7.1.11) exon 2
6954	19438	32451	0.85	2.0E-13	10835072	NT	Homo sapiens N-myristoyltransferase 1 (NMT1), mRNA
6954	19438	32452	0.85	2.0E-13	10835072	NT	Homo sapiens N-myristoyltransferase 1 (NMT1), mRNA
10355	23002	36219	3.87	2.0E-13	5031886	NT	Homo sapiens mab-21 (C. elegans)-like 1 (MAB21L1) mRNA
12106	24602		3.48	2.0E-13	AW892155.1	EST_HUMAN	CMO-NN0001-100300-274-e11 NN0001 Homo sapiens cDNA
285	13091	25732	1.52	1.0E-13	S74129.1	NT	FGF-1=fibroblast growth factor 1 [human, kidney, Genomic, 342 nt, segment 2 of 2]
808	13637	28307	5.84	1.0E-13	AJ007973.1	NT	Homo sapiens LGMD2B gene
1313	14061	28736	1.08	1.0E-13	X87344.1	NT	H. sapiens DNA, DMB, HLA-Z1, IPP2, LMP2, TAP1, LMP7, TAP2, DOB, DOB2 and RING8, 9, 13 and 14 genes
2015	14750	27478	2.13	1.0E-13	AA720574.1	EST_HUMAN	nr21g02.s1 NCI_CGAP_GC80 Homo sapiens cDNA clone IMAGE:1241138 3' similar to contains THR.13
4553	17288	28917	1.64	1.0E-13	BF340887.1	EST_HUMAN	THR repetitive element;
7810	20505	33628	0.78	1.0E-13	AA577812.1	EST_HUMAN	802038009F1 NCI_CGAP_Bm64 Homo sapiens cDNA clone IMAGE:4185888 5'
7810	20505	33627	0.78	1.0E-13	AA577812.1	EST_HUMAN	nr24d01.s1 NCI_CGAP_Gas1 Homo sapiens cDNA clone IMAGE:1084801 3' similar to contains Alu
9990	22638		0.79	1.0E-13	O15481	SWISSPROT	repetitive element; contains element MER24 repetitive element;
10189	22847	36063	0.53	1.0E-13	AF300701.1	NT	repetitive element; contains element MER24 repetitive element;
11352	24042	37345	11.1	1.0E-13	BF108755.1	EST_HUMAN	repetitive element; contains element MER24 repetitive element;
11934	24492		2.25	1.0E-13	AV716377.1	EST_HUMAN	MELANOMA-ASSOCIATED ANTIGEN B4 (MAGE-B4 ANTIGEN)
12583	24893		2.12	1.0E-13	AJ271735.1	NT	Mus musculus oocyte-specific protein tyrosine phosphatase mRNA, complete cds
324	13125	25781	1.81	9.0E-14	AA781159.1	EST_HUMAN	7145e10.x1 Scores_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3524443 3' similar to contains MER29.b2 MER29 repetitive element;
325	13126	25782	3.05	9.0E-14	AA781159.1	EST_HUMAN	AV716377 DCB Homo sapiens cDNA clone DCBAIE03 5'
2504	15221		3.86	9.0E-14	AW881577.1	EST_HUMAN	Homo sapiens Xq pseudautosomal region; segment 1/2
2589	15313	28050	1.18	9.0E-14	AJ133127.1	NT	Homo sapiens testis_NHT Homo sapiens cDNA clone 1391232 3' similar to contains MER19.t1 MER19 repetitive element;
2589	15313	28051	1.18	9.0E-14	AJ133127.1	NT	aj24c01.s1 Scores_testis_NHT Homo sapiens cDNA clone 1391232 3' similar to contains MER19.t1 MER19 repetitive element;
2758	15463	28206	2.6	9.0E-14	AB038162.1	NT	aj24c01.s1 Scores_testis_NHT Homo sapiens cDNA clone 1391232 3' similar to contains MER19.t1 MER19 repetitive element;
3109	15874	28513	3.96	9.0E-14	AW513296.1	EST_HUMAN	aj24c01.s1 Scores_testis_NHT Homo sapiens cDNA clone 1391232 3' similar to contains MER19.t1 MER19 repetitive element;
							RC4-CT0322-080100-013-d09 CT0322 Homo sapiens cDNA
							Homo sapiens mRNA for sodium-glucose cotransporter (SGLT2 gene)
							Homo sapiens mRNA for sodium-glucose cotransporter (SGLT2 gene)
							Homo sapiens TFF gene cluster for trefoil factor, complete cds
							xo54h05.x1 NCI_CGAP_UH1 Homo sapiens cDNA clone IMAGE:2707833 3'

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3232	13125	25781	0.84	9.0E-14	AA781158.1	EST_HUMAN	af24c01.s1 Soares_testis_NHT Homo sapiens cDNA clone 1391232 3' similar to contains MER19.11 MER19 repetitive element;
3778	16530	29169	0.85	9.0E-14	D14547.1	NT	Human DNA, SINE repetitive element
4707	17439	30071	1.06	9.0E-14	AJ002163.1	NT	Segitrus oedipus gene for seminal vesicle secreted protein semenogelin I
3489	18245		1.27	8.0E-14	BE488283.1	EST_HUMAN	h271c09.x1 NCI_CGAP_L124 Homo sapiens cDNA clone IMAGE:3213424 3'
3937	19687		2.87	8.0E-14	R76289.1	EST_HUMAN	yf72e03.r1 Soares placenta NB2-IP Homo sapiens cDNA clone IMAGE:144798 3'
9348	20419	33539	15.04	8.0E-14	X89211.1	NT	H. sapiens DNA for endogenous retroviral like element
9400	22010	35180	3.69	8.0E-14	AA219316.1	EST_HUMAN	zq17c10.s1 Strategene fetal retina 937202 Homo sapiens cDNA clone IMAGE:826970 3'
11410	24059		1.72	8.0E-14	BE082558.1	EST_HUMAN	QV2-BT0288-261089-014-e01 BT0288 Homo sapiens cDNA
12302	24727	31056	2.48	8.0E-14	AJ688118.1	EST_HUMAN	wc92h08.x1 NCI_CGAP_C03 Homo sapiens cDNA clone IMAGE:2328143 3'
1825	15574		4.77	7.0E-14	AW151673.1	EST_HUMAN	xf87e10.x1 NCI_CGAP_G04 Homo sapiens cDNA clone IMAGE:2623148 3' similar to contains MER10.12 MER10 repetitive element;
8818	21510		10.57	7.0E-14	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
358	13156	25797	14.14	6.0E-14	AF020503.1	NT	Homo sapiens FRA3B common fragile region, diadenosine triphosphate hydrolase (FHT) gene, exon 5
9722	22373	35572	2.6	6.0E-14	AF020503.1	NT	Homo sapiens FRA3B common fragile region, diadenosine triphosphate hydrolase (FHT) gene, exon 5
9722	22373	35573	2.6	6.0E-14	AF020503.1	NT	Homo sapiens FRA3B common fragile region, diadenosine triphosphate hydrolase (FHT) gene, exon 5
604	13382	26014	5.46	5.0E-14	Q63120	SWISSPROT	Homo sapiens FRA3B common fragile region, diadenosine triphosphate hydrolase (FHT) gene, exon 5 CANALICULAR MULTISPECIFIC ORGANIC ANION TRANSPORTER 1 (MULTIDRUG RESISTANCE- ASSOCIATED PROTEIN 2) (CANALICULAR MULTIDRUG RESISTANCE PROTEIN)
4693	17716	30322	1.41	5.0E-14	AW073791.1	EST_HUMAN	x603b05.x1 NCI_CGAP_GU1 Homo sapiens cDNA clone IMAGE:2575185 3' similar to contains L1.12 L1 repetitive element;
5446	18245	31133	5.77	5.0E-14	P08547	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
1101	15560		2.18	4.0E-14	P04928	SWISSPROT	S-ANTIGEN PROTEIN PRECURSOR
1570	14608	27319	5.9	4.0E-14	AJ007973.1	NT	Homo sapiens LGMD2B gene
3735	16488		0.87	4.0E-14	AA046502.1	EST_HUMAN	z67a06.LT Soares_pregnant_uterus_NCHPU Homo sapiens cDNA clone IMAGE:487888 5'
4259	17000	29830	1.05	4.0E-14	NA6328.1	EST_HUMAN	yf73c12.s1 Soares_multiple_sclerosis_ZNDRMSP Homo sapiens cDNA clone IMAGE:279190 3' similar to contains L1.13 L1 repetitive element;
7858	20553		0.59	4.0E-14	X87344.1	NT	H. sapiens DMA, DMB, HLA-Z1, PP2, LMP2, TAP1, LMP7, TAP2, DOB, DOB2 and RING8, 9, 13 and 14 genes
12626	25414		7.02	4.0E-14	AI886224.1	EST_HUMAN	wm08c03.x1 NCI_CGAP_U14 Homo sapiens cDNA clone IMAGE:2435332 3' similar to contains Alu repetitive element;
930	13697	26361	1.88	3.0E-14	X95468.1	NT	R. norvegicus mRNA for CPG2 protein

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4870	17597	30220	0.92	3.0E-14	AW265354.1	EST_HUMAN	xp45f12.x1 NCL_CGAP_HN11 Homo sapiens cDNA clone IMAGE:2743343 3' similar to contains Alu repetitive element; contains element MER9 repetitive element;
4873	17600	30222	0.97	3.0E-14	7856894	NT	Homo sapiens a disintegrin and metalloproteinase domain 28 (ADAM28), mRNA
6835	18397	32411	1.49	3.0E-14	A1420786.1	EST_HUMAN	FATTY ACID AMIDE HYDROLASE ;
6835	18397	32412	1.49	3.0E-14	A1420786.1	EST_HUMAN	FATTY ACID AMIDE HYDROLASE ;
6744	25089		0.82	3.0E-14	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C048
8686	21378	34522	0.87	3.0E-14	N42165.1	EST_HUMAN	W07b10.11 Soares melanocyte 2NblHM Homo sapiens cDNA clone IMAGE:270523 5'
10914	23594	36840	1.28	3.0E-14	BE888016.1	EST_HUMAN	601511530F1 NIH_MGC 71 Homo sapiens cDNA clone IMAGE:3913087 6'
11201	17597	30220	7.19	3.0E-14	AW265354.1	EST_HUMAN	xp45f12.x1 NCL_CGAP_HN11 Homo sapiens cDNA clone IMAGE:2743343 3' similar to contains Alu repetitive element; contains element MER9 repetitive element;
12539	25282		1.88	3.0E-14	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
381	13168	25811	3.71	2.0E-14	AJ271738.1	NT	Homo sapiens Xq pseudautosomal region; segment 2/2
381	13168	25812	3.71	2.0E-14	AJ271738.1	NT	Homo sapiens Xq pseudautosomal region; segment 2/2
674	15548	26091	9.05	2.0E-14	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
2387	15108		1.49	2.0E-14	AW372888.1	EST_HUMAN	RG5-BT0377-091289-031-D12 BT0377 Homo sapiens cDNA
2497	15185		2.15	2.0E-14	7857528	NT	Homo sapiens ribobold tumor deletion region protein 1 (RTDR1), mRNA
2529	15245	27883	1.19	2.0E-14	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
2542	18258		1.14	2.0E-14	BE222432.1	EST_HUMAN	hvd0g10.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3180738 3' similar to contains Alu repetitive element; contains OFR.11 OFR repetitive element ;
2681	15390		0.95	2.0E-14	P08548	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
5437	18236	30650	0.8	2.0E-14	BF380991.1	EST_HUMAN	IL2-UT0072-240800-142-D07 UT0072 Homo sapiens cDNA
5533	18331	31236	0.92	2.0E-14	A1312351.1	EST_HUMAN	la78h01.x2 NCL_CGAP_HSC2 Homo sapiens cDNA clone IMAGE:2050225 3' similar to contains L1.13 L1 repetitive element;
5634	18420	31342	3.42	2.0E-14	U01317.1	NT	Human beta globin region on chromosome 11
6784	19528		0.91	2.0E-14	BE000550.1	EST_HUMAN	RC3-BN0072-240200-011-e06 BN0072 Homo sapiens cDNA
6894	18677	32724	0.82	2.0E-14	4585709	NT	Homo sapiens a disintegrin and metalloproteinase domain 11 (ADAM11) mRNA
7185	19871	32945	1.25	2.0E-14	P58163	SWISSPROT	ZINC-FINGER PROTEIN NEURO-D4
7407	20084	33187	22.12	2.0E-14	BE158761.1	EST_HUMAN	IL2-HT0397-071289-024-D04 HT0397 Homo sapiens cDNA
7407	20084	33188	22.12	2.0E-14	BE158761.1	EST_HUMAN	IL2-HT0397-071289-024-D04 HT0397 Homo sapiens cDNA
9817	22468	35871	0.57	2.0E-14	A1878785.1	EST_HUMAN	wf59g10.x1 NCL_CGAP_UH1 Homo sapiens cDNA clone IMAGE:2492034 3' similar to contains Alu repetitive element;
10317	22964	36181	0.53	2.0E-14	AV741648.1	EST_HUMAN	AV741648 CB Homo sapiens cDNA clone CBFBFBF04 5'

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10679	23370	36612	4.88	2.0E-14	AW136800.1	EST_HUMAN	UI-H-B1-actw-e-10-0-UJ.s1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2718234 3'
11591	24160	37507	1.29	2.0E-14	AW083999.1	EST_HUMAN	xc36102.x1 NCI_CGAP_Co20 Homo sapiens cDNA clone IMAGE:2580363 3' similar to contains MIER1.13
12536	25284		2.29	2.0E-14	AF008191.1	NT	MER1 repetitive element;
1045	13804	26463	1.88	1.0E-14	AL163249.2	NT	Homo sapiens putative G6 protein (GR6) gene, complete cds
1385	14132	26805	6.41	1.0E-14	AL163268.2	NT	Homo sapiens chromosome 21 segment HS21C046
1385	14132	26808	6.41	1.0E-14	AL163268.2	NT	Homo sapiens chromosome 21 segment HS21C088
1994	14730	27452	12.44	1.0E-14	L44140.1	NT	Homo sapiens chromosome X region from filamin (FLN) gene to glucose-6-phosphate dehydrogenase (G6PD) gene, complete cds's
2182	14911	27643	4.55	1.0E-14	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
2409	15130	27866	3.56	1.0E-14	AF001689.1	NT	Homo sapiens ribosomal protein L23A (RPL23A) gene, complete cds
2845	15711	28363	1.79	1.0E-14	P05227	SWISSPROT	HISTIDINE-RICH PROTEIN PRECURSOR (CLONE PFHRP-II)
3165	15928	28576	5.42	1.0E-14	BF335227.1	EST_HUMAN	RC2-CT0432-310700-013-a09_1 CT0432 Homo sapiens cDNA
3165	15928	28577	5.42	1.0E-14	BF335227.1	EST_HUMAN	RC2-CT0432-310700-013-a09_1 CT0432 Homo sapiens cDNA
3866	16616	29255	1.87	1.0E-14	AA082894.1	EST_HUMAN	ae89c12.s1 Striatogene schizo brain S11 Homo sapiens cDNA clone IMAGE:971350 3'
4440	17176	29802	1.91	1.0E-14	AW275852.1	EST_HUMAN	xq39h10.x1 NCI_CGAP_Lu28 Homo sapiens cDNA clone IMAGE:2753059 3'
5719	18511	31432	2.42	1.0E-14	AF126145.1	NT	Bos taurus xenobiotic/medium-chain fatty acid:CoA ligase form XL-III mRNA, nuclear mRNA encoding mitochondrial protein, complete cds
6576	25095	32351	11.5	1.0E-14	11437150	NT	Homo sapiens promilin (mouse)-like 1 (PROML1), mRNA
6576	25095	32352	11.5	1.0E-14	11437150	NT	Homo sapiens promilin (mouse)-like 1 (PROML1), mRNA
11818	15928	28576	3.05	1.0E-14	BF335227.1	EST_HUMAN	RC2-CT0432-310700-013-a09_1 CT0432 Homo sapiens cDNA
11818	15928	28577	3.05	1.0E-14	BF335227.1	EST_HUMAN	RC2-CT0432-310700-013-a09_1 CT0432 Homo sapiens cDNA
1570	14317	27002	2.06	9.0E-15	7427522	NT	Homo sapiens protein tyrosine phosphatase, receptor type, T (PTPRT), mRNA
2170	14999		1.43	9.0E-15	AF198779.1	NT	Homo sapiens transcription factor IGHM enhancer 3, JM11 protein, JM4 protein, JM5 protein, T54 protein, JM10 protein, A4 differentiation-dependent protein, triple LIM domain protein 6, and synaptophysin genes, complete cds; and L-type calcium channel $\alpha$
7395	20074	33152	4.51	9.0E-15	P21416	SWISSPROT	GAG POLYPEPTIDE [CONTAINS: CORE PROTEINS P15, P12, P30, P10]
7915	20910	33740	1.08	9.0E-15	BE903559.1	EST_HUMAN	60167750F1 NIH_MGC 21 Homo sapiens cDNA clone IMAGE:3960156 5'
12718	24991		2.36	9.0E-15	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
2814	13263		0.91	8.0E-16	BE281482.1	EST_HUMAN	601148632F1 NIH_MGC 19 Homo sapiens cDNA clone IMAGE:3164023 5'
7081	19771	32836	1.14	7.0E-15	BF035327.1	EST_HUMAN	601456531F1 NIH_MGC 86 Homo sapiens cDNA clone IMAGE:3962086 5'
10334	22981		3.07	7.0E-15	AW241958.1	EST_HUMAN	xn77402.x1 Soares NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2700483 3' similar to contains THR.12 THR repetitive element;
973	13738	26403	8.04	6.0E-15	AJ271736.1	NT	Homo sapiens Xq pseudautosomal region; segment 2/2

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5829	19618	31649	1.02	6.0E-15	X73462.1	NT	O. aries mRNA for hair keratin cysteine-rich protein
5829	19618	31550	1.02	6.0E-15	X73462.1	NT	O. aries mRNA for hair keratin cysteine-rich protein
401	13186	26834	6.93	5.0E-15	AL163208.2	NT	Homo sapiens chromosome 21 segment HS21C008
2764	15469	28212	1.38	5.0E-15	U91328.1	NT	Human hereditary haemochromatosis region, histone 2A-like protein gene, hereditary haemochromatosis (HLA-H) gene, RbR1et gene, and sodium phosphate transporter (NPT3) gene, complete cds
3461	16217		1.03	5.0E-15	AW286917.1	EST_HUMAN	UIH-BW0-ajb-g-10-U1.s1 NCI_CGAP Sub8 Homo sapiens cDNA clone HTFAVE08 5'
10574	23269		2.4	5.0E-15	AV730056.1	EST_HUMAN	AV730056 HTF Homo sapiens cDNA clone HTFAVE08 5'
418	12829	25442	2.85	4.0E-15	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
6697	18332	32339	0.76	4.0E-15	AB007870.1	NT	Homo sapiens mRNA, chromosome 1 specific transcript KIAA0501
10894	20392	33505	3.08	4.0E-15	AJ130894.1	NT	Homo sapiens mRNA for transcription factor
10894	20392	33506	3.08	4.0E-15	AJ130894.1	NT	Homo sapiens mRNA for transcription factor
4192	16833		7.06	3.0E-15	N89452.1	EST_HUMAN	LY1142F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA clone LY1142 5' similar to ANF(CARDIODILATIN)
4872	17599		0.79	3.0E-15	P92485	SWISSPROT	NADH-UBIQUINONE OXIDOREDUCTASE CHAIN 5
6716	19631		1.33	3.0E-15	Q64825	SWISSPROT	GLUTATHIONE PEROXIDASE RY2D1 PRECURSOR (ODORANT-METABOLIZING PROTEIN RY2D1)
7179	19865	32937	2.9	3.0E-15	M27685.1	NT	Mus musculus ultra high sulfur keratin gene, complete cds
7179	19865	32938	2.9	3.0E-15	M27685.1	NT	Mus musculus ultra high sulfur keratin gene, complete cds
9825	22476		2.51	3.0E-15	AA807128.1	EST_HUMAN	cc36a07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1351784 3' similar to contains MER19.11 MER19 repetitive element
10694	23385	36825	2.47	3.0E-15	AB026898.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
12310	26316		1.81	3.0E-15	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
12814	25056		1.35	3.0E-15	AW877214.1	EST_HUMAN	GM4-PT0034-180200-508-a01 P10034 Homo sapiens cDNA
243	13052	25692	3.6	2.0E-15	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
359	13157	25798	3.99	2.0E-15	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
359	13157	25799	3.99	2.0E-15	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
3500	16256	28910	0.71	2.0E-15	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
3500	16256	28911	0.71	2.0E-15	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4049	16794	29423	1.08	2.0E-15	AW238499.1	EST_HUMAN	xp26h01.x1 NCL_CGAP_HN10 Homo sapiens cDNA clone IMAGE:2741521 3' similar to contains L1, B L1 repetitive element;
4580	17315		2.46	2.0E-15	AI806335.1	EST_HUMAN	wf07f06.x1 Soares_NFL_T_QBC_S1 Homo sapiens cDNA clone IMAGE:2349823 3' similar to TR:Q81043 Q81043 NINEIN.;
6089	18887	31833	0.88	2.0E-15	BE62352.1	EST_HUMAN	601344253F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3677288 5'
6089	18887	31834	0.88	2.0E-15	BE62352.1	EST_HUMAN	601344253F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3677288 5'
7014	19706		1.5	2.0E-15	AJ400877.1	NT	Homo sapiens ASCL3 gene, CEGP1 gene, C11orf14 gene, C11orf15 gene, C11orf16 gene and C11orf17 gene
7171	19857	32928	2.62	2.0E-15	AA704105.1	EST_HUMAN	zj7f03.s1 Soares_fetal_liver_spleen_INFLS_S1 Homo sapiens cDNA clone IMAGE:480824 3'
7284	19977	33054	5.18	2.0E-15	W08064.1	EST_HUMAN	za78d10.r1 Soares_fetal_liver_NbHL19W Homo sapiens cDNA clone IMAGE:208675 5' similar to WP:F44F4.8 CE02227 TRANSPOSASE.;
8804	21496	34642	2.86	2.0E-15	D14547.1	NT	Human DNA, SINE repetitive element
8971	21881	34811	1	2.0E-15	AA397758.1	EST_HUMAN	zj7f08.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:728414 5'
8971	21881	34812	1	2.0E-15	AA397758.1	EST_HUMAN	zj7f08.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:728414 5'
9304	21871	35145	1.23	2.0E-15	AW379465.1	EST_HUMAN	CM0-HT0244-201069-078-12 HT0244 Homo sapiens cDNA
9304	21971	35146	1.23	2.0E-15	AW379465.1	EST_HUMAN	CM0-HT0244-201069-078-12 HT0244 Homo sapiens cDNA
10742	23428		5.68	2.0E-15	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
12451	25338		2.04	2.0E-15	U82828.1	NT	Homo sapiens ataxia telangiectasia (ATM) gene, complete cds
12653	16256	28910	3.34	2.0E-15	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
12653	16256	28911	3.34	2.0E-15	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
2777	15492		2.39	1.0E-15	AI689984.1	EST_HUMAN	b22h05.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:2270745 3' similar to TR:Q13539 Q13539 MARINER TRANSPOSASE.;
3011	15777	28427	1.35	1.0E-15	BE043584.1	EST_HUMAN	h40e02.y1 NCL_CGAP_Ov34 Homo sapiens cDNA clone IMAGE:2999162 5'
3139	15903	28548	1.29	1.0E-15	P08547	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
5138	17956		0.97	1.0E-15	AW021431.1	EST_HUMAN	df23e06.y1 Morton Fetal Cochlea Homo sapiens cDNA clone IMAGE:2484202 5'
8279	19052	32030	1.74	1.0E-15	T85763.1	EST_HUMAN	ye40a10.s1 Soares_fetal_liver_spleen_INFLS Homo sapiens cDNA clone IMAGE:120234 3' similar to contains MER8 repetitive element;
8909	19647		2.12	1.0E-15	BE074217.1	EST_HUMAN	QV3-BT0569-270100-074-g05 BT0569 Homo sapiens cDNA
8131	20825	33961	0.85	1.0E-15	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
8319	21012	34149	4.56	1.0E-15	AI200978.1	EST_HUMAN	qf68h08.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1755227 3'
8319	21012	34150	4.56	1.0E-15	AI200978.1	EST_HUMAN	qf68h08.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1755227 3'
8937	21628	34770	0.67	1.0E-15	AL163207.2	NT	Homo sapiens chromosome 21 segment HS21C007

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Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8940	21631	34774	1.78	1.0E-15	4507208	NT	Homo sapiens spermidine synthase (SRM) mRNA
9146	21877	35042	0.87	1.0E-15	Q39575	SWISSPROT	DYNEIN GAMMA CHAIN, FLAGELLAR OUTER ARM
9532	22185	35370	0.94	1.0E-15	AA804853.1	EST_HUMAN	cd37c03.s1 NCL_CGAP_Kid3 Homo sapiens cDNA clone IMAGE:1459972 3' similar to contains L1.13 L1
10720	23408	36651	3.6	1.0E-15	AF044083.1	NT	repetitive element;
12722	25148	36868	4.72	1.0E-15	A1783944.1	EST_HUMAN	Homo sapiens major histocompatibility locus class III region
4469	17204	29830	0.88	9.0E-16	4503188	NT	Homo sapiens cut (Drosophila)-like 1 (CCAAAT displacement protein) (GUTL1) mRNA
10815	23595	36841	2.04	9.0E-16	F08688.1	EST_HUMAN	HSC23F051 normalized infant brain cDNA Homo sapiens cDNA clone o-23f05
11606	24291	37615	1.46	9.0E-16	A1244341.1	EST_HUMAN	q76a02.x1 NCL_CGAP_Kid3 Homo sapiens cDNA clone IMAGE:1885354 3' similar to contains MER10.13
11696	24291	37616	1.46	9.0E-16	A1244341.1	EST_HUMAN	q76a02.x1 NCL_CGAP_Kid3 Homo sapiens cDNA clone IMAGE:1885354 3' similar to contains MER10.13
5615	18411	31324	0.71	7.0E-16	4885120	NT	MER10 repetitive element;
7241	19928	33001	1.49	7.0E-16	O88807	SWISSPROT	Homo sapiens chemokine (C-C motif) receptor 8 (CCR8) mRNA
7241	19928	33002	1.49	7.0E-16	O88807	SWISSPROT	PROTEIN-ARGININE DEIMINASE TYPE IV (PEPTIDYLARGININE DEIMINASE IV) (PAD-R4)
12675	25237		1.98	7.0E-16	T94149.1	EST_HUMAN	(PEPTIDYLARGININE DEIMINASE TYPE ALPHA)
2137	14867		8.38	6.0E-16	AW972811.1	EST_HUMAN	PROTEIN-ARGININE DEIMINASE TYPE IV (PEPTIDYLARGININE DEIMINASE IV) (PAD-R4)
1476	14223	20908	1.08	5.0E-16	AJ251154.1	NT	ye28c12.11 Stratiogene lung (#837210) Homo sapiens cDNA clone IMAGE:119062 5'
2887	15398	28134	2.17	5.0E-16	AA992176.1	EST_HUMAN	EST384702 MAGE resequences, MAGL Homo sapiens cDNA
8954	22802	35806	0.84	5.0E-16	AL163246.2	NT	Mus musculus olfactory receptor cluster, OR37A, OR37B, OR37C, OR37E genes and OR37D pseudogene
11504	24105	37418	3.6	5.0E-16	BF217368.1	EST_HUMAN	cd80c04.s1 Scores_total_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:1623078 3' similar to
12757	25018		14.19	5.0E-16	11418127	NT	contains element L1 repetitive element;
2233	14961		1.81	4.0E-16	AB001823.1	NT	Homo sapiens chromosome 21 segment HS21C046
2378	15100	27839	1.77	4.0E-16	AW767188.1	EST_HUMAN	Homo sapiens cDNA clone IMAGE:4104128 5'
2378	15100	27840	1.77	4.0E-16	AW767188.1	EST_HUMAN	Homo sapiens GTP binding protein 1 (GTPBP1), mRNA
3460	16206	28856	3.58	4.0E-16	Q10653	SWISSPROT	Homo sapiens gene for TMEM1 and PW/P2, complete and partial cds
4121	16863	29489	5.02	4.0E-16	BE083875.1	EST_HUMAN	QV1-UM0036-200300-115-g02 UM0036 Homo sapiens cDNA
4121	16863	29490	5.02	4.0E-16	BE083875.1	EST_HUMAN	QV1-UM0036-200300-115-g02 UM0036 Homo sapiens cDNA
7812	20278	33386	46.62	4.0E-16	AL163284.2	NT	MYELIN-OLIGODENDROCYTE GLYCOPROTEIN PRECURSOR
							PM4-BT0650-010400-002-g09 BT0650 Homo sapiens cDNA
							PM4-BT0650-010400-002-g09 BT0650 Homo sapiens cDNA
							Homo sapiens chromosome 21 segment HS21C084

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9195	21865	35029	1.04	4.0E-16	11423191	NT	Homo sapiens hypothetical protein FLJ10024 (FLJ10024), mRNA
11182	23847	37133	1.51	4.0E-16	AV730030.1	EST_HUMAN	AV730030 HTF Homo sapiens cDNA clone HTFAWA03 5'
11851	24435	37778	1.44	4.0E-16	Q62832	SWISSPROT	FOLLISTATIN-RELATED PROTEIN PRECURSOR
12014	24547		2.04	4.0E-16	P08548	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
12109	24605	31087	2.51	4.0E-16	6912459	NT	Homo sapiens Grb2-associated binder 2 (KIAA0571), mRNA
130	12945	25589	2.03	3.0E-16	AW022852.1	EST_HUMAN	df45c01.y1 Morton Fetal Cochlea Homo sapiens cDNA clone IMAGE:2486376 5'
130	12945	25590	2.03	3.0E-16	AW022852.1	EST_HUMAN	df45c01.y1 Morton Fetal Cochlea Homo sapiens cDNA clone IMAGE:2486376 5'
453	13239		1.5	3.0E-16	AL046445.1	EST_HUMAN	DKFZp434P037.1 434 (synonym: hbs3) Homo sapiens cDNA clone DKFZp434P037 5'
463	13248		1.5	3.0E-16	AF135446.1	NT	Homo sapiens TSX (TSX) pseudogene, exon 5
1435	14182	26867	1.38	3.0E-16	Q28983	SWISSPROT	ZONADHESIN PRECURSOR
2975	15741	26388	3.76	3.0E-16	P03200	SWISSPROT	ENVELOPE GLYCOPROTEIN GP340 (MEMBRANE ANTIGEN) (MA) [CONTAINS: GLYCOPROTEIN GP220]
3913	16653	26304	19.83	3.0E-16	T08169.1	EST_HUMAN	EST06060 Infant Brain, Banto Soares Homo sapiens cDNA clone HIBBA13 5' end
3939	16889		0.95	3.0E-16	U03887.1	NT	Human BXP20 gene
5196	18004		0.99	3.0E-16	AA077225.1	EST_HUMAN	7B10F02 Chromosome 7 Fetal Brain cDNA Library Homo sapiens cDNA clone 7B10F02
5529	18327	31230	1.79	3.0E-16	AF003520.1	NT	Homo sapiens glypican 3 (GPC3) gene, partial cds and flanking repeat regions
8556	21248	34387	4.26	3.0E-16	AK02836.1	EST_HUMAN	am98h05.s1 Stratagene schizo brain S11 Homo sapiens cDNA clone IMAGE:1694185 3' similar to contains THR.b2 THR repetitive element ;
9790	22441		0.89	3.0E-16	BF600617.1	EST_HUMAN	602246538F1 NIH_MGC_82 Homo sapiens cDNA clone IMAGE:4332032 5'
10019	22667	36883	6.57	3.0E-16	L78810.1	NT	Homo sapiens ADP/ATP carrier protein (ANT-2) gene, complete cds
951	13717		1.2	2.0E-16	AL163279.2	NT	Homo sapiens chromosome 21 segment HS21G079
2385	15105		0.91	2.0E-16	AA621791.1	EST_HUMAN	af06c04.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1030855 3'
2904	15403		1.06	2.0E-16	J03061.1	NT	Human SSAV-related endogenous retroviral LTR-like element
4157	16697	29526	1.16	2.0E-16	X69211.1	NT	H. sapiens DNA for endogenous retroviral like element
4447	17183	29807	0.98	2.0E-16	A1208733.1	EST_HUMAN	qq5603.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1839197 3' similar to contains MER29.13
5104	17822	30439	0.78	2.0E-16	BE061178.1	EST_HUMAN	MER29 repetitive element ;
6842	19404	32419	0.99	2.0E-16	Q31125	SWISSPROT	RC3-BT0046-131199-003-H12 BT0046 Homo sapiens cDNA
7615	20281	33389	0.75	2.0E-16	A1470723.1	EST_HUMAN	HISTIDINE-RICH PROTEIN KE4
							g16e11.x1 NCL_CGAP_Gae4 Homo sapiens cDNA clone IMAGE:2141708 3' similar to contains element
							MER33 repetitive element ;
7867	20562	33689	2.14	2.0E-16	A1732637.1	EST_HUMAN	nz47906.x5 NCL_CGAP_P12 Homo sapiens cDNA clone IMAGE:1290947 similar to TR:054849 054849
8058	20752	33883	0.57	2.0E-16	BE958026.1	EST_HUMAN	HYPOTHEICAL 42.9 KD PROTEIN. [2] TR:008905 contains MER7.1 MER7 repetitive element ;



Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8058	20752	33884	0.57	2.0E-16	BE58028.1	EST_HUMAN	7182109.x1 NCL CGAP_P28 Homo sapiens cDNA clone IMAGE:3303521 3'
8425	21118	34256	0.81	2.0E-16	AW877214.1	EST_HUMAN	CM4-PT0034-180200-506-e01 PT0034 Homo sapiens cDNA
8425	21118	34257	0.81	2.0E-16	AW877214.1	EST_HUMAN	CM4-PT0034-180200-506-e01 PT0034 Homo sapiens cDNA
180	12992	25630	1.84	1.0E-16	AF200719.1	NT	Homo sapiens pituitary tumor transforming gene protein (PTTG) gene, complete cds
373	13188		29.06	1.0E-16	AA628592.1	EST_HUMAN	af39g11.s1 Soares_tetis_Nb2HF8_gw Homo sapiens cDNA clone IMAGE:1034084 3' similar to contains OFR.12 OFR repetitive element:
1963	14699	27414	2.37	1.0E-16	BF327942.1	EST_HUMAN	QV0-BN0148-070700-283-a10 BN0148 Homo sapiens cDNA
5835	19430	31343	0.75	1.0E-16	AF163864.1	NT	Homo sapiens SNCA isoform (SNCA) gene, complete cds, alternatively spliced
6341	19111		27.85	1.0E-16	U45983.1	NT	Homo sapiens CCR8 chemokine receptor (CMKBR8) gene, complete cds
6479	19246	32246	3.39	1.0E-16	Q02779	SWISSPROT	MITOGEN-ACTIVATED PROTEIN KINASE KINASE 10 (MIXED LINEAGE KINASE 2) (PROTEIN KINASE MST)
7453	19111		7.15	1.0E-16	U45983.1	NT	Homo sapiens CCR8 chemokine receptor (CMKBR8) gene, complete cds
9183	21853	35018	1.07	1.0E-16	AW875651.1	EST_HUMAN	QV2-PT0012-040400-124-e06 PT0012 Homo sapiens cDNA
3722	19475	29112	2.11	9.0E-17	AW900046.1	EST_HUMAN	CM1-NN1003-200300-153-e01 NN1003 Homo sapiens cDNA
6824	19386		2.2	9.0E-17	A1392964.1	EST_HUMAN	lg22a11.x1 NCL CGAP_CLL1 Homo sapiens cDNA clone IMAGE:2109524 3' similar to contains MER28.12
8007	20702		4.76	9.0E-17	AW150257.1	EST_HUMAN	MER28 repetitive element:
10124	22772		2.47	9.0E-17	AF200719.1	NT	QV49g12.x1 NCL CGAP_UH1 Homo sapiens cDNA clone IMAGE:2830850 3' similar to contains OFR.12 OFR repetitive element:
897	13757		1.77	8.0E-17	AW890701.1	EST_HUMAN	Homo sapiens pituitary tumor transforming gene protein (PTTG) gene, complete cds
3872	16622		0.87	8.0E-17	AL163280.2	NT	QV0-OT0032-060300-155-d01 OT0032 Homo sapiens cDNA
5496	25069	31183	3.7	8.0E-17	BE172081.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C080
7175	19861		1.94	8.0E-17	AV730759.1	EST_HUMAN	MRO-HT0550-060300-003-e04 HT0550 Homo sapiens cDNA
1441	14188		3.44	7.0E-17	6753097	NT	AV730759 HTF Homo sapiens cDNA clone HTFAGB07 5'
5240	18046		3.3	7.0E-17	AF216660.1	NT	Mus musculus apolipoprotein B editing complex 2 (ApoBec2), mRNA
6588	19351	32385	8.05	7.0E-17	AF220843.1	NT	Homo sapiens putative MTAP (MTAP) mRNA, partial cds, alternatively spliced
198	13011	25653	8	6.0E-17	AW963860.1	EST_HUMAN	Mus musculus WNT-2 gene, partial cds; putative ankyrin-related protein and cystic fibrosis transmembrane conductance regulator (CFTR) genes, section 1 of 2 of the complete cds; and unknown gene
6221	19995	31971	1.64	6.0E-17	AW662772.1	EST_HUMAN	RC1-HN0003-220300-021-b04 HN0003 Homo sapiens cDNA
10190	22838	36053	0.46	6.0E-17	P20138	SWISSPROT	h181d04.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2978965 3' similar to contains L1.12
412	12823	25436	2.97	5.0E-17	T64110.1	EST_HUMAN	h181d04.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2978965 3' similar to contains L1.12
7496	20158	33250	2.09	5.0E-17	T81043.1	EST_HUMAN	MYELOID CELL SURFACE ANTIGEN CD33 PRECURSOR (GP67)
							yc06f08.1 Stragene lung (#637210) Homo sapiens cDNA clone IMAGE:79839 5'
							yc28f04.1 Soares fetal liver spleen 1N1LS Homo sapiens cDNA clone IMAGE:109327 5'

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3628	16379	29020	0.89	4.0E-17	AA843697.1	EST_HUMAN	trp6a05.s1 NCL_CGAP_Co10 Homo sapiens cDNA clone IMAGE:1058528 3'
9282	22018	35184	1.07	4.0E-17	AW129185.1	EST_HUMAN	x20e04.x1 NCL_CGAP_Kid8 Homo sapiens cDNA clone IMAGE:2818622 3' similar to contains Alu repetitive element; contains MER19.b1 MER19 repetitive element;
11475	24078	37388	2.84	4.0E-17	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
12027	24555		1.75	4.0E-17	AJ073546.1	EST_HUMAN	ov45e04.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1640288 3' similar to TRCQ16530 Q16530 PMSS MRNA ; contains MER10.12 MER10 repetitive element;
1477	14224		1.14	3.0E-17	D14547.1	NT	Human DNA, SINE repetitive element
2091	14822	27554	1.85	3.0E-17	AW119123.1	EST_HUMAN	xd89c09.x1 Soares_NFL_I_GBC_S1 Homo sapiens cDNA clone IMAGE:2004784 3'
3188	15951		1.18	3.0E-17	P35410	SWISSPROT	MAS-RELATED G PROTEIN-COUPLED RECEPTOR MRG
3633	16398	29026	1.34	3.0E-17	BE326522.1	EST_HUMAN	hw05b04.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3181989 3'
3633	16398	29027	1.34	3.0E-17	BE326522.1	EST_HUMAN	hw05b04.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3181989 3'
4970	17695		1.89	3.0E-17	BF511298.1	EST_HUMAN	U1-H-B14-ep-c-06-0-JL.a1 NCL_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3085043 3'
8186	20860	33892	5.16	3.0E-17	N68451.1	EST_HUMAN	zr14b02.s1 Soares_fetal_liver_spleen_1NFLS Homo sapiens cDNA clone IMAGE:292491 3' similar to contains PTR5.t3 PTR5 repetitive element;
9601	22254	35439	6.58	3.0E-17	AB026898.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
10279	22927	36140	0.84	3.0E-17	BF327012.1	EST_HUMAN	QV3-BN0047-270700-283-a12 BN0047 Homo sapiens cDNA
10279	22927	36141	0.84	3.0E-17	BF327012.1	EST_HUMAN	QV3-BN0047-270700-283-a12 BN0047 Homo sapiens cDNA
11864	24532		3.65	3.0E-17	11417986	NT	Homo sapiens SEC14 (S. cerevisiae)-like 2 (SEC14L2), mRNA
12784	26023		1.44	3.0E-17	AV720204.1	EST_HUMAN	AV720204 GLC Homo sapiens cDNA clone GLCJIF08 5'
343	13144	25782	3	2.0E-17	AJ270080.1	EST_HUMAN	q163a06.x1 NCL_CGAP_Eso2 Homo sapiens cDNA clone IMAGE:1958922 3' similar to contains Alu repetitive element;
344	13144	25782	2.17	2.0E-17	AJ270080.1	EST_HUMAN	q163a06.x1 NCL_CGAP_Eso2 Homo sapiens cDNA clone IMAGE:1958922 3' similar to contains Alu repetitive element;
907	13733		1.84	2.0E-17	AA722832.1	EST_HUMAN	zq81d04.s1 Soares_fetal_heart_NbHH19W Homo sapiens cDNA clone IMAGE:399751 3'
2448	15167	27904	2.21	2.0E-17	Q28083	SWISSPROT	ZONADHESIN PRECURSOR
2448	15167	27906	2.21	2.0E-17	Q28083	SWISSPROT	ZONADHESIN PRECURSOR
2630	15696	28343	6.64	2.0E-17	P12036	SWISSPROT	NEUROFILAMENT TRIPLET H PROTEIN (200 KDA NEUROFILAMENT PROTEIN) (NEUROFILAMENT HEAVY POLYPEPTIDE) (NF-H)
5282	18087	30745	1.88	2.0E-17	M27685.1	NT	Mus musculus ultra high sulfur keratin gene, complete cds
5282	18087	30746	1.88	2.0E-17	M27685.1	NT	Mus musculus ultra high sulfur keratin gene, complete cds
6171	18048		2.04	2.0E-17	AF055068.1	NT	Homo sapiens MHC class 1 region
6398	19167		1.16	2.0E-17	AL134881.1	EST_HUMAN	DKFZp762J0610_r1_782 (synonym: hmal2) Homo sapiens cDNA clone DKFZp762J0610 5'
7982	20677	33802	1.12	2.0E-17	Q95156	SWISSPROT	OLFACTORY RECEPTOR-LIKE PROTEIN OLF3

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8356	21049	34188	1	2.0E-17	AA300640.1	EST_HUMAN	EST13504, Testis tumor Homo sapiens cDNA 5' and similar to glycogenin
9769	22420	35628	2.81	2.0E-17	BE298988.1	EST_HUMAN	800944690F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:2860815 5'
9804	22455	36657	3.22	2.0E-17	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
9804	22455	36658	3.22	2.0E-17	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
10189	22807	36025	4.82	2.0E-17	D13391.1	NT	Human CYP19 gene for aromatase cytochrome P-450, promoter region (containing two cis-acting transcriptional regulatory elements)
10278	22928	36138	0.73	2.0E-17	P98063	SWISSPROT	BONE MORPHOGENETIC PROTEIN 1 PRECURSOR (BMP-1)
10278	22928	36139	0.73	2.0E-17	P98063	SWISSPROT	BONE MORPHOGENETIC PROTEIN 1 PRECURSOR (BMP-1)
10307	22954	36169	0.49	2.0E-17	A1789902.1	EST_HUMAN	w694604.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2348719 3'
10307	22954	36170	0.49	2.0E-17	A1789902.1	EST_HUMAN	w694604.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2348719 3'
733	13507	26164	3.66	1.0E-17	P08183	SWISSPROT	MULTIDRUG RESISTANCE PROTEIN 1 (P-GLYCOPROTEIN 1)
1703	14446		1.26	1.0E-17	AJ271736.1	NT	Homo sapiens Xq pseudautosomal region; segment 2/2
1761	14503	27204	2.73	1.0E-17	AL163207.2	NT	Homo sapiens chromosome 21 segment HS21C007
2109	14840	27571	2.35	1.0E-17	P02481	SWISSPROT	COLLAGEN ALPHA 1(III) CHAIN PRECURSOR
2335	15059	27766	2.06	1.0E-17	U79410.1	NT	Homo sapiens thrombospondin 2 (THBS2) gene, promoter region and exons 1A and 1B
3554	16309		1.3	1.0E-17	AF224696.1	NT	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
4119	18858		7.37	1.0E-17	R09942.1	EST_HUMAN	yf30e07.11 Soares fetal liver spleen INFLS Homo sapiens cDNA clone IMAGE:128388 5'
6366	19136		0.89	1.0E-17	AW469468.1	EST_HUMAN	he38a05.x1 NCI_CGAP_CML1 Homo sapiens cDNA clone IMAGE:2921312 3' similar to contains Alu repetitive element/contains LTR8.11 LTR8 repetitive element
6555	19320	32327	2.04	1.0E-17	A185642.1	EST_HUMAN	q65505.x1 Soares_fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:1749825 3'
6555	19320	32328	2.04	1.0E-17	A185642.1	EST_HUMAN	q65505.x1 Soares_fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:1749825 3'
6989	19682	32730	0.93	1.0E-17	Q18831	SWISSPROT	URIDINE PHOSPHORYLASE (UDRPASE)
8490	21182	34324	1.33	1.0E-17	BE062744.1	EST_HUMAN	QV0-BT0283-101269-072-d07 BT0283 Homo sapiens cDNA
9807	22556	35751	0.88	1.0E-17	AW996538.1	EST_HUMAN	QV3-BN0046-220300-128-c10 BN0046 Homo sapiens cDNA
11394	24000	37304	2.09	1.0E-17	Q28824	SWISSPROT	MYOSIN LIGHT CHAIN KINASE, SMOOTH MUSCLE (MLCK) [CONTAINS: TELOKIN]
11732	24325	37849	2.47	1.0E-17	AA453047.1	EST_HUMAN	zx49f05.s1 Soares testis NHT Homo sapiens cDNA clone IMAGE:795489 3' similar to TR:G1263081
2474	15182	27632	0.95	9.0E-18	AA174078.1	EST_HUMAN	G1263081 MARINER TRANSPOSASE ;
6398	22060		3.31	9.0E-18	A1472167.1	EST_HUMAN	zp18g12.s1 Stratiotes fetal retina 93/202 Homo sapiens cDNA clone IMAGE:609662 3'
3786	16518	28156	1.52	8.0E-18		NT	996d03.x1 Soares_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:2148360 3'
					4756977	NT	Homo sapiens protein tyrosine phosphatase, non-receptor type substrate 1 (PTPNS1) mRNA
339	13140	26778	16.92	7.0E-18	AW318676.1	EST_HUMAN	xx10b04.x1 NCI_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2837071 3' similar to gb:L20868 60S RIBOSOMAL PROTEIN L4 (HUMAN);

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
339	13140	26777	16.92	7.0E-18	AW316976.1	EST_HUMAN	xx10b04.x1 NCL_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2837071 3' similar to gb:L20868 60S
7343	20024	33100	1.33	7.0E-18	AW687542.1	EST_HUMAN	RIBOSOMAL PROTEIN L4 (HUMAN); RC3-OT0091-170300-011-003 OT0091 Homo sapiens cDNA
12492	13140	25776	3.41	7.0E-18	AW316976.1	EST_HUMAN	xx10b04.x1 NCL_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2837071 3' similar to gb:L20868 60S
12492	13140	25777	3.41	7.0E-18	AW316976.1	EST_HUMAN	RIBOSOMAL PROTEIN L4 (HUMAN); xx10b04.x1 NCL_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2837071 3' similar to gb:L20868 60S
3289	18050	28688	1	6.0E-18	X71791.2	NT	RIBOSOMAL PROTEIN L4 (HUMAN); Rattus norvegicus partial Gdn/Fr-1 gene for gila-derived nadin/protease nadin 1, enhancer region
4698	17432		3.02	6.0E-18	P52181	SWISSPROT	PROTEIN-GLUTAMINE GAMMA-GLUTAMYL TRANSFERASE (TISSUE TRANSGLUTAMINASE) (TGASE C) (TGC)
8148	20842		2.84	6.0E-18	11428155	NT	Homo sapiens similar to high-mobility group (nonhistone chromosomal) protein 4 (H. sapiens) (LOC63446), mRNA
8246	20640	34077	0.72	6.0E-18	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
11079	23749	37024	1.61	6.0E-18	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
11300	23690	37280	1.74	6.0E-18	X87344.1	NT	H. sapiens DNA, DMB, HLA-Z1, IPP2, LMP2, TAP1, LMP7, TAP2, DOB, DQB2 and RING8, 9, 13 and 14 genes
12241	24692	31076	3.29	6.0E-18	U87929.1	NT	Human acortitate hydratase (ACO2) gene, exon 4
1125	13881	28641	21.7	5.0E-18	AL280214.1	EST_HUMAN	qtr05g11.x1 Soares_plocenta_8169weeks_2NbhP8b9W Homo sapiens cDNA clone IMAGE:1893668 3' similar to contains Alu repetitive element
5047	17768	30384	0.98	6.0E-18	D61517.1	EST_HUMAN	HUM411F05B Clontech human fetal brain polyA+ mRNA (#6535) Homo sapiens cDNA clone GEN-411F05 5'
5191	17989	30622	1.2	5.0E-18	AF087913.1	NT	Human endogenous retrovirus HERV-P-T47D
8620	21312	34454	6.25	5.0E-18	BE143312.1	EST_HUMAN	MRO-HT0161-221099-002-c06 HT0161 Homo sapiens cDNA
10899	23579	36828	3.47	5.0E-18	10242378	NT	Homo sapiens lymphocyte activation-associated protein (LOC51088), mRNA
10899	23579	36828	3.47	5.0E-18	10242378	NT	Homo sapiens lymphocyte activation-associated protein (LOC51088), mRNA
12388	24770		3.4	5.0E-18	AW867182.1	EST_HUMAN	MRI-SN0035-060400-001-g11 SN0035 Homo sapiens cDNA
12695	24978		4.16	5.0E-18	AV650547.1	EST_HUMAN	AV650547 GLC Homo sapiens cDNA clone GLCCGA02 3'
121	12939	25580	1.37	4.0E-18	BE044076.1	EST_HUMAN	ho38H04.x1 NCL_CGAP_UH1 Homo sapiens cDNA clone IMAGE:3039511 3' similar to contains MER29.b3
121	12939	25581	1.37	4.0E-18	BE044076.1	EST_HUMAN	MER29 repetitive element; ho38H04.x1 NCL_CGAP_UH1 Homo sapiens cDNA clone IMAGE:3039511 3' similar to contains MER29.b3
1711	14454	27153	1.19	4.0E-18	AA821814.1	EST_HUMAN	mq24H11.e1 NCL_CGAP_Cot10 Homo sapiens cDNA clone IMAGE:1144845 3' similar to gb:M26326
1882	14619		1.12	4.0E-18	A1738592.1	EST_HUMAN	KERATIN, TYPE I CYTOSKELETAL 18 (HUMAN); wi33H08.x1 NCL_CGAP_Cot16 Homo sapiens cDNA clone IMAGE:2392065 3'

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2198	14927	27662	1.33	4.0E-18	Q06430	SWISSPROT	N-ACETYLACTOSAMINIDE BETA-1,6-N-ACETYLGLUCOSAMINYLTRANSFERASE (N-ACETYLGLUCOSAMINYLTRANSFERASE) (L-BRANCHING ENZYME) (IGNT)
2198	14927	27663	1.33	4.0E-18	Q06430	SWISSPROT	N-ACETYLACTOSAMINIDE BETA-1,6-N-ACETYLGLUCOSAMINYLTRANSFERASE (N-ACETYLGLUCOSAMINYLTRANSFERASE) (L-BRANCHING ENZYME) (IGNT)
3772	16624	29162	0.88	4.0E-18	A1581586.1	EST_HUMAN	repetitive element
5279	18084	30740	2.24	4.0E-18	A1017565.1	EST_HUMAN	repetitive element
5279	18084	30741	2.24	4.0E-18	A1017565.1	EST_HUMAN	repetitive element
7745	20441		0.63	4.0E-18	AA746811.1	EST_HUMAN	repetitive element
10927	23607	36858	8.76	4.0E-18	AA371807.1	EST_HUMAN	EST183633 Pituitary gland, subtracted (prolactin/growth hormone) II Homo sapiens cDNA 5' end similar to
828	13599	28270	1.88	3.0E-18	AA814196.1	EST_HUMAN	cb23h11.1 s1 NCL CGAP_Kid5 Homo sapiens cDNA clone IMAGE:1324581 3' similar to SW:RS5_HUMAN
909	13676	26340	3.47	3.0E-18	BE088634.1	EST_HUMAN	P46782 40S RIBOSOMAL PROTEIN S5 ;
3931	16681	29322	1.47	3.0E-18	AL163247.2	NT	Homo sapiens chromosome 21 segment H321C047
6730	19584	32598	5.84	3.0E-18	BE001671.1	EST_HUMAN	PMO-BN0081-100300-001-008 BN0081 Homo sapiens cDNA
10844	23526	36798	1.61	3.0E-18	BF218650.1	EST_HUMAN	601884856F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4103662 5'
12487	24852		6.14	3.0E-18	AW022015.1	EST_HUMAN	df31h12.y1 Morton Fetal Cochlea Homo sapiens cDNA clone IMAGE:2465126 5'
244	13063	25693	4.42	2.0E-18	AW836820.1	EST_HUMAN	QV1-LT0036-150200-070-e07 LT0036 Homo sapiens cDNA
1130	13886		62.93	2.0E-18	BE256067.1	EST_HUMAN	601114352F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3356044 5'
5326	18129		3.19	2.0E-18	AA668610.1	EST_HUMAN	el63a07.s1 Soares_bests_NHT Homo sapiens cDNA clone IMAGE:1409652 3' similar to TR:O14577
5419	18218	30927	3.68	2.0E-18	D14547.1	NT	O14577 BAC CLONE RG114A06 FROM TQ31, COMPLETE SEQUENCE ;
5419	18218	30928	3.68	2.0E-18	D14547.1	NT	Human DNA, SINE repetitive element
5788	18579		1.68	2.0E-18	BF347229.1	EST_HUMAN	Human DNA, SINE repetitive element
6073	18852	31817	0.77	2.0E-18	X60459.1	NT	60202164F1 NCL CGAP_Bim67 Homo sapiens cDNA clone IMAGE:4156670 5'
6073	18852	31818	0.77	2.0E-18	X60459.1	NT	Human IFNAR gene for interferon alpha/beta receptor
6165	18962	31935	1.04	2.0E-18	BF352940.1	EST_HUMAN	Human IFNAR gene for interferon alpha/beta receptor
6226	19000	31977	5.18	2.0E-18	AW665853.1	EST_HUMAN	IL3-HT0619-220700-222-C12 HT0619 Homo sapiens cDNA
7336	20018	33098	0.81	2.0E-18	AA457619.1	EST_HUMAN	h94g01.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2879984 3' similar to contains
8047	20741	33873	0.47	2.0E-18	BE436524.1	EST_HUMAN	MER19.12 MER19 repetitive element ;
							ae89d11.1 Stratagene fetal retina 937202 Homo sapiens cDNA clone IMAGE:838485 5' similar to
							TR:G61634 G61634 POLYPEPTIDE PR77 ;
							HTM1-160F1 HTM1 Homo sapiens cDNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9947	22595	35798	1.86	2.0E-18	AW151673.1	EST_HUMAN	x87e10.x1 NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2623146 3' similar to contains MER10.12 MER10 repetitive element;
9947	22595	35798	1.86	2.0E-18	AW151673.1	EST_HUMAN	x87e10.x1 NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2623146 3' similar to contains MER10.12 MER10 repetitive element;
10894	23574	36824	2	2.0E-18	AW470701.1	EST_HUMAN	hs33d06.x1 NCI_CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2876499 3' similar to contains THR.b3 THR repetitive element;
11736	24329	37653	3.81	2.0E-18	AW151289.1	EST_HUMAN	xg47e09.x1 NCI_CGAP_Uti Homo sapiens cDNA clone IMAGE:2630728 3' similar to contains MER8.b2 MER8 repetitive element;
12174	13886		1.45	2.0E-18	BE258097.1	EST_HUMAN	601114352FT NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3355044 5'
4382	17119		1.02	1.0E-18	T95406.1	EST_HUMAN	ye43g05.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:120536 5' similar to contains L1 repetitive element;
5271	18077	30707	3.63	1.0E-18	AV653405.1	EST_HUMAN	AV653405 GLC Homo sapiens cDNA clone GLCDKE11 3'
5483	18282	31180	2.94	1.0E-18	D00099.1	NT	Homo sapiens mRNA for Na,K-ATPase alpha-subunit, complete cds
5483	18282	31181	2.94	1.0E-18	D00099.1	NT	Homo sapiens mRNA for Na,K-ATPase alpha-subunit, complete cds
6363	19133	32128	1.63	1.0E-18	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
8341	21034	34171	1.43	1.0E-18	AI148288.1	EST_HUMAN	cc69d09.x1 Soares senescent fibroblasts_NbHSF Homo sapiens cDNA clone IMAGE:1680683 3' similar to contains L1.11 L1 repetitive element;
9798	22450	35663	4.22	1.0E-18	U91328.1	NT	Human hereditary haemochromatosis region, histone 2A-like protein gene, hereditary haemochromatosis (H1A-H) gene, RoRet gene, and sodium phosphate transporter (NPT3) gene, complete cds
12190	24621	31092	4.23	1.0E-18	AF003529.1	NT	Homo sapiens glypican 3 (GPC3) gene, partial cds and flanking repeat regions
532	13316	25952	5.34	9.0E-19	AA281061.1	EST_HUMAN	zh11d08.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:712811 5' similar to contains MER19.12 MER19 repetitive element;
533	13316	25952	3.24	9.0E-19	AA281061.1	EST_HUMAN	zh11d08.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:712811 5' similar to contains MER19.12 MER19 repetitive element;
7747	20443		4.47	9.0E-19	F08688.1	EST_HUMAN	HSC23F051 normalized infant brain cDNA Homo sapiens cDNA clone c-23105
8588	21280	34419	2.84	9.0E-19	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
8588	21280	34420	2.84	9.0E-19	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
11072	23742	37016	4.82	9.0E-19	AB032099.1	NT	Homo sapiens mRNA for KIAA1143 protein, partial cds
11901	13316	25952	1.88	9.0E-19	AA281061.1	EST_HUMAN	zh11d08.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:712811 5' similar to contains MER19.12 MER19 repetitive element;
1028	13788		1.25	8.0E-19	AW974802.1	EST_HUMAN	EST387007 MAGE resequences, MAGN Homo sapiens cDNA
4372	17110		1.04	8.0E-19	P08646	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
8048	20742	33874	0.92	8.0E-19	BE158936.1	EST_HUMAN	MRO-HT0404-210200-001-g08 HT0404 Homo sapiens cDNA

Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2242	14970	27708	1.51	7.0E-19	4788139	NT	Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 6 (RNA helicase, 54kD) (DDX6) mRNA
6384	19134	32129	2.34	7.0E-19	AF092090.1	NT	Rattus norvegicus cp151 mRNA, partial cds
7199	18885	32959	0.9	7.0E-19	P28444	SWISSPROT	BETA CRYSTALLIN A2
8911	22590	35756	0.51	7.0E-19	A1344951.1	EST_HUMAN	h01c08.x1 NCL CGAP_Ju28 Homo sapiens cDNA clone IMAGE:2052302 3'
12036	25397		2.05	7.0E-19	AA705884.1	EST_HUMAN	z60b01.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:435145 3'
3781	16513		1.34	6.0E-19	AW852830.1	EST_HUMAN	PM0-CT0248-131089-001-g01 CT0248 Homo sapiens cDNA
4430	17163	29795	1.36	6.0E-19	P34986	SWISSPROT	OLFACTORY RECEPTOR 6 (M50)
4430	17166	29798	1.36	6.0E-19	P34986	SWISSPROT	OLFACTORY RECEPTOR 6 (M50)
4747	17479		1.3	6.0E-19	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
4897	17892	30301	1.04	6.0E-19	AL120817.1	EST_HUMAN	DKFZp762F192_J1 762 (synonym: hmel2) Homo sapiens cDNA clone DKFZp762F192 5'
5767	18558	31485	5.36	5.0E-19	Q00193	SWISSPROT	ZONA PELLUCIDA SPERM-BINDING PROTEIN B PRECURSOR (ZONA PELLUCIDA GLYCOPROTEIN ZP-X) (RC55)
10324	22971	36191	1.03	5.0E-19	AJ287869.1	NT	Homo sapiens partial IL-12RB1 gene for IL-12 receptor beta1 chain, exon 14
11525	24125	37431	7.45	5.0E-19	AW183725.1	EST_HUMAN	487b02.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2684171 3' similar to contains element MSR1 repetitive element;
541	13324	26956	1.66	4.0E-19	AB007970.1	NT	Homo sapiens mRNA, chromosome 1 specific transcript KIAA0501
2689	15398	28136	1.02	4.0E-19	BF087362.1	EST_HUMAN	602130910F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4287674 5'
5311	18115	30773	0.97	4.0E-19	AF224639.1	NT	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
3833	16584	29219	1.04	3.0E-19	Q28897	SWISSPROT	BETA-2 ADRENERGIC RECEPTOR
3833	16584	29220	1.04	3.0E-19	Q28897	SWISSPROT	BETA-2 ADRENERGIC RECEPTOR
4253	16904	29622	0.96	3.0E-19	O43900	SWISSPROT	LIM-ONLY PROTEIN 6 (TRIPLE LIM DOMAIN PROTEIN 6)
4253	16904	29623	0.96	3.0E-19	O43900	SWISSPROT	LIM-ONLY PROTEIN 6 (TRIPLE LIM DOMAIN PROTEIN 6)
4413	17160	29777	1.12	3.0E-19	AV708139.1	EST_HUMAN	AV708136 ADC Homo sapiens cDNA clone ADCAMA11 5'
5198	18006		0.64	3.0E-19	AF223467.1	NT	Homo sapiens NPD008 protein (NPD008) mRNA, complete cds
7283	19988		2.79	3.0E-19	11432214	NT	Homo sapiens similar to aldo-keto reductase family 1, member B11 (aldose reductase-like) (H. sapiens) (LOC63222), mRNA
9359	20430	33548	1.15	3.0E-19	X89885.1	NT	M.musculus mRNA for TPOR33 protein
12264	24709		23.34	3.0E-19	AF165520.1	NT	Homo sapiens phorbol 1 protein (PBI) mRNA, complete cds
2565	15279	28017	21.33	2.0E-19	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
4411	17148		1.03	2.0E-19	A1311783.1	EST_HUMAN	q091e02.x1 NCL CGAP_Kid5 Homo sapiens cDNA clone IMAGE:1915898 3' similar to TR:Q69386 Q69386 POU/ENY GENE;
5963	18745	31708	0.57	2.0E-19	AV731382.1	EST_HUMAN	AV731382 HTF Homo sapiens cDNA clone HTFAZ006 5'

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7238	19823	32088	0.93	2.0E-19	7657286	NT	Mus musculus keratin-associated protein 9-1 (Krtap9-1), mRNA
8228	20922	34061	8.08	2.0E-19	AA012854.1	EST_HUMAN	z334c09.1 Soares retina N2b4HR Homo sapiens cDNA clone IMAGE:360880 5'
9809	22460	35666	0.68	2.0E-19	Q95155	SWISSPROT	OLFACTORY RECEPTOR-LIKE PROTEIN OLF2
11829	24413	37760	1.33	2.0E-19	BF330887.1	EST_HUMAN	RC3-BT0333-250800-114-04 BT0333 Homo sapiens cDNA
11829	24413	37751	1.33	2.0E-19	BF330887.1	EST_HUMAN	RC3-BT0333-250800-114-04 BT0333 Homo sapiens cDNA
469	13255		1.87	1.0E-19	BE408611.1	EST_HUMAN	601304125F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3638310 5'
2161	14881	27628	1.58	1.0E-19	H30795.1	EST_HUMAN	yo79q07.1 Soares adult brain N2b-4HB55Y Homo sapiens cDNA clone IMAGE:184188 5' similar to contains
2723	15430		2.37	1.0E-19	D38044.1	NT	MER10 repetitive element;
2851	15919		4.95	1.0E-19	4758977	NT	Human gene for A1-receptor, exon 7-9
3396	16154	28806	1.2	1.0E-19	AA834967.1	EST_HUMAN	Homo sapiens protein tyrosine phosphatase, non-receptor type substrate 1 (PTPNS1) mRNA
5983	18784	31728	2.38	1.0E-19	U12186.1	NT	449b12.81 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1393631 3' similar to contains MER37.12
6114	25419		0.83	1.0E-19	AA595527.1	EST_HUMAN	MER37 repetitive element;
7528	20189	33293	0.86	1.0E-19	U08813.1	NT	Oryctolagus cuniculus sodium/dicarboxylate cotransporter mRNA, partial cds
7628	20189	33294	0.86	1.0E-19	U08813.1	NT	ih22403.s1 NCI_CGAP_P1 Homo sapiens cDNA clone IMAGE:953083 similar to contains L1.11 L1
7895	25118		0.93	1.0E-19	AF200719.1	NT	Oryctolagus cuniculus Na <sup>+</sup> /glucose cotransporter-related protein mRNA, complete cds
8349	21042	34179	1.75	1.0E-19	M64657.1	NT	Oryctolagus cuniculus Na <sup>+</sup> /glucose cotransporter-related protein mRNA, complete cds
8840	21332		2.84	1.0E-19	T98920.1	EST_HUMAN	Homo sapiens pituitary tumor transforming gene protein (PTTG) gene, complete cds
9849	22301		0.46	1.0E-19	U60822.1	NT	Rabbit phosphorylase kinase beta subunit mRNA, complete cds
10087	22735	35950	23.03	1.0E-19	AW812259.1	EST_HUMAN	ye72b02.1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:123243 5' similar to contains
10097	22745	35950	1.46	1.0E-19	N44631.1	EST_HUMAN	OFK repetitive element;
11780	24351	37683	1.55	1.0E-19	U93163.1	NT	Human dystrophin (DMD) gene, exons 7, 8 and 9, and partial cds
6649	19314	32319	2.66	8.0E-20	7657286	NT	RCQ-ST0174-191099-031-b05 ST0174 Homo sapiens cDNA
6549	19314	32320	2.66	8.0E-20	7657286	NT	Y931e09.1 Soares melanocyte 2NblHM Homo sapiens cDNA clone IMAGE:272872 5'
7418	20095	33180	1.34	8.0E-20	A1221371.1	EST_HUMAN	Homo sapiens IMAGE-B2 (MAGE-B2), MAGE-B3 (MAGE-B3), MAGE-B4 (MAGE-B4), and MAGE-B1
7418	20095	33181	1.34	8.0E-20	A1221371.1	EST_HUMAN	(MAGE-B1) genes, complete cds
3270	19031	28682	1.41	7.0E-20	BF326455.1	EST_HUMAN	Mus musculus keratin-associated protein 9-1 (Krtap9-1), mRNA
6896	17972	30529	6.29	7.0E-20	AL138120.1	EST_HUMAN	Mus musculus keratin-associated protein 9-1 (Krtap9-1), mRNA
8394	21087	34222	12.48	7.0E-20	AA557657.1	EST_HUMAN	Mus musculus keratin-associated protein 9-1 (Krtap9-1), mRNA



Table 4  
Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8394	21087	34223	12.48	7.0E-20	AA557657.1	EST_HUMAN	n14604.s1 NCI_CGAP_P14 Homo sapiens cDNA clone IMAGE:1043718 similar to contains MER29.b2
11714	24308		1.95	7.0E-20	6912833	NT	MER29 repetitive element;
3543	16298	28949	3.52	6.0E-20	P39188	SWISSPROT	Homo sapiens ribosomal protein L13a (RPL13A), mRNA
4239	16980	29805	3.33	6.0E-20	BE622434.1	EST_HUMAN	ALU SUBFAMILY J SEQUENCE CONTAMINATION WARNING ENTRY
4556	17291		1.18	6.0E-20	AV726123.1	EST_HUMAN	601441231F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3916231 5'
7015	19707	32763	1.07	6.0E-20	AF075301.1	EST_HUMAN	AV726123 HTC Homo sapiens cDNA clone HTCBTA01 5'
7846	20541	33688	5.28	6.0E-20	W90525.1	EST_HUMAN	AF075301 Human fetal liver cDNA library Homo sapiens cDNA clone HA0250
7846	20541	33688	5.28	6.0E-20	W90525.1	EST_HUMAN	z178d08.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:418191 3' similar to contains MER30.11 MER30 repetitive element;
8002	20697	33825	0.7	5.0E-20	BE165980.1	EST_HUMAN	z178d08.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:418191 3' similar to contains MER30.11 MER30 repetitive element;
8734	21426	34572	2.54	5.0E-20	AB028174.1	NT	MR3-H70487-150200-113-g01 HT0487 Homo sapiens cDNA
8734	21426	34573	2.54	5.0E-20	AB028174.1	NT	Mus musculus MMAN-g mRNA, complete cds
8345	20416		0.94	5.0E-20	O80809	SWISSPROT	Mus musculus MMAN-g mRNA, complete cds
1616	14363	27054	1.34	4.0E-20	AL163247.2	NT	HYPOTHETICAL PROTEIN DJ845024.1
5562	18399		0.8	4.0E-20	Q89880	SWISSPROT	Homo sapiens chromosome 21 segment HS21C047
7808	20521		5.15	4.0E-20	A1874352.1	EST_HUMAN	HISTONE H2B C (H2B/C)
10396	23042	36259	1.33	4.0E-20	AW937489.1	EST_HUMAN	zb4g03.x1 NCI_CGAP_Ov35 Homo sapiens cDNA clone IMAGE:2283396 3'
2195	14865	27595	1.02	3.0E-20	U03888.1	NT	QV3-DT0043-090200-080-c04 DT0043 Homo sapiens cDNA
4185	16926	28557	1.29	3.0E-20	P23273	SWISSPROT	Human BXP21 gene
4882	17317	28944	1.05	3.0E-20	AA037616.1	EST_HUMAN	OLFACTORY RECEPTOR-LIKE PROTEIN H4
8833	21525		2.95	3.0E-20	D14547.1	NT	z388b12.s1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:484895 3' similar to contains L1.13 L1 repetitive element;
10219	22867	36078	0.93	3.0E-20	BF185284.1	EST_HUMAN	Human DNA, SINE repetitive element
10561	23257		1.87	3.0E-20	P11369	SWISSPROT	601843561F1 NIH_MGC_54 Homo sapiens cDNA clone IMAGE:4064343 5'
11466	24087	37408	1.5	3.0E-20	A1284244.1	EST_HUMAN	RETROVIRUS-RELATED POLYPROTEIN [CONTAINS: REVERSE TRANSCRIPTASE; ; ENDONUCLEASE]
11466	24087	37408	1.5	3.0E-20	A1284244.1	EST_HUMAN	q70d002.x1 NCI_CGAP_Kid3 Homo sapiens cDNA clone IMAGE:1864803 3' similar to contains Alu repetitive element;
12051	24569	31118	2.65	3.0E-20	BE888422.1	EST_HUMAN	q70d002.x1 NCI_CGAP_Kid3 Homo sapiens cDNA clone IMAGE:1864803 3' similar to contains Alu repetitive element;
811	13582		3.12	2.0E-20	AW303898.1	EST_HUMAN	q70d002.x1 NCI_CGAP_Kid3 Homo sapiens cDNA clone IMAGE:1864803 3' similar to contains Alu repetitive element;
							x24e10.x1 NCI_CGAP_U14 Homo sapiens cDNA clone IMAGE:3915522 5'
							P97461 40S RIBOSOMAL PROTEIN S5. ;

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1089	13847	26505	3.37	2.0E-20	AA516335.1	EST_HUMAN	ng69h09.s1 NCL_CGAP_Lip2 Homo sapiens cDNA clone IMAGE:940097 similar to TR:G1224066
1089	13847	26506	3.37	2.0E-20	AA516335.1	EST_HUMAN	G1224066 ORF2: FUNCTION UNKNOWN.
2820	13582		2.38	2.0E-20	AW303888.1	EST_HUMAN	ng69h09.s1 NCL_CGAP_Lip2 Homo sapiens cDNA clone IMAGE:940097 similar to TR:G1224066
4863	17620	30238	4.97	2.0E-20	Q28883	SWISSPROT	G1224066 ORF2: FUNCTION UNKNOWN.
4863	17620	30239	4.97	2.0E-20	Q28883	SWISSPROT	3x24e10.x1 NCL_CGAP_U14 Homo sapiens cDNA clone IMAGE:2761098 3' similar to SW:RS5_MOUSE
5057	17786		5.98	2.0E-20	5174538	NT	P97481 40S RIBOSOMAL PROTEIN S6.
8017	20712	33843	0.81	2.0E-20	AA309457.1	EST_HUMAN	ZONADHESIN PRECURSOR
8088	21778	34942	8.6	2.0E-20	D10083.1	NT	ZONADHESIN PRECURSOR
8089	21778	34943	8.6	2.0E-20	D10083.1	NT	Homo sapiens malate dehydrogenase 1, NAD (soluble) (MDH1) mRNA
12426	26141	30895	2.03	2.0E-20	H66371.1	EST_HUMAN	Homo sapiens RGH1 gene, retrovirus-like element
12815	25057		1.39	2.0E-20	11437152	NT	Homo sapiens RGH1 gene, retrovirus-like element
2007	15525	27488	3.71	1.0E-20	AA281961.1	EST_HUMAN	CHR220310 Chromosome 22 exon Homo sapiens cDNA clone C22_391 5'
4406	17143	29772	1	1.0E-20	BF115158.1	EST_HUMAN	Homo sapiens heparin-binding growth factor binding protein (HBP17), mRNA
6794	19538	32588	0.75	1.0E-20	AF049567.1	EST_HUMAN	z11d08.f1 NCL_CGAP_GC81 Homo sapiens cDNA clone IMAGE:712811 5' similar to contains MER19.12
9061	21750	34908	2.04	1.0E-20	11418491	NT	MER19 repetitive element.
11541	24141	37450	2.82	1.0E-20	AF223391.1	NT	hr84p09.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3135155 3' similar to contains L1.12 L1
12171	24951		1.73	1.0E-20	AA420453.1	EST_HUMAN	repetitive element.
2813	15879		0.98	9.0E-21	AJ003514.1	EST_HUMAN	AF049567 Human activated dendritic cell mRNA Homo sapiens cDNA clone GA05
11904	24469		2.62	9.0E-21	AW868189.1	EST_HUMAN	Homo sapiens Autosomal Highly Conserved Protein (A-HCP), mRNA
8711	21403		2.15	8.0E-21	AW674891.1	EST_HUMAN	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
11528	24126	37432	3.52	8.0E-21	AA809411.1	EST_HUMAN	nc90p08.f1 NCL_CGAP_PT1 Homo sapiens cDNA clone IMAGE:745694 similar to contains L1.13 L1
12064	24579		4.49	8.0E-21	O21330	SWISSPROT	repetitive element.
2061	14793	27518	1.62	7.0E-21	P15800	SWISSPROT	AJ003514 Selected chromosome 21 cDNA library Homo sapiens cDNA clone MPIp12-8J21
2061	14793	27519	1.62	7.0E-21	P15800	SWISSPROT	RC3-NN0068-090500-021-b03 NN0068 Homo sapiens cDNA
3889	16442	23083	0.69	7.0E-21	AL163300.2	NT	9530e02.y1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2984714 5' similar to SW:NIAM_HUMAN
4228	16869		5.58	7.0E-21	AA046302.1	EST_HUMAN	Q95188 NADH-UBIQUINONE OXIDOREDUCTASE ASH1 SUBUNIT PRECURSOR.

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6340	19110	32100	0.79	7.0E-21	AL163218.2	NT	Homo sapiens chromosome 21 segment HS21C018
8287	20981	34121	1.53	7.0E-21	AJ277557.1	NT	Homo sapiens dNT-2 gene for mitochondrial 5(3')-deoxyribonucleotidase (dNT-2 gene), exons 1-5
8578	21268	34407	10.76	7.0E-21	D14718.1	NT	Human chromosomal protein HMGI related gene
10013	22661	35877	0.86	7.0E-21	AW850822.1	EST_HUMAN	RC0-GT0301-271198-031-F03 CT0301 Homo sapiens cDNA
10894	23288	36525	2.19	7.0E-21	AA723404.1	EST_HUMAN	zq73d03.s1 Soares_fetal_heart_NbHH19W Homo sapiens cDNA clone IMAGE:398881 3' similar to gb:M14338 VITAMIN K-DEPENDENT PROTEIN S PRECURSOR (HUMAN); contains THR.3 OFR repetitive element ;
11234	23897	37184	1.75	7.0E-21	7708888	NT	Homo sapiens PTD013 protein (PTD013), mRNA
4083	19827	28454	0.83	6.0E-21	BE408611.1	EST_HUMAN	601304125F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3638310 5'
9034	21724	26334	0.6	6.0E-21	BE162737.1	EST_HUMAN	PM1-HT0454-080100-002-h09 HT0454 Homo sapiens cDNA
903	13670	26334	0.7	5.0E-21	5802031	NT	Homo sapiens protein tyrosine phosphatase, non-receptor type 21 (PTPN21), mRNA
4330	17069	26697	2.91	5.0E-21	BE968839.1	EST_HUMAN	601649871F1 NIH_MGC_74 Homo sapiens cDNA clone IMAGE:3933880 5'
4749	17481	30112	5.58	5.0E-21	4885474	NT	Homo sapiens melanoma antigen, family C, 1 (MAGEC1), mRNA
6695	19582		0.9	5.0E-21	AW440864.1	EST_HUMAN	he05e10.x1 NCL_CGAP_CML1 Homo sapiens cDNA clone IMAGE:2818154 3'
6917	19654	32700	0.86	5.0E-21	BE856505.1	EST_HUMAN	7183d11.x1 NCL_CGAP_P28 Homo sapiens cDNA clone IMAGE:3303573 3' similar to contains OFRL1 OFR repetitive element ;
10474	23120	36349	0.44	5.0E-21	Q91680	SWISSPROT	ZINC FINGER PROTEIN GLI1 (GLI-1)
10474	23120	36350	0.44	5.0E-21	Q91680	SWISSPROT	ZINC FINGER PROTEIN GLI1 (GLI-1)
11896	24527		2.83	5.0E-21	AA393574.1	EST_HUMAN	z172c04.t1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:727878 5'
1727	14489	27188	1.81	4.0E-21	AA970743.1	EST_HUMAN	cc89e08.s1 NCL_CGAP_Kid5 Homo sapiens cDNA clone IMAGE:1573094 3' similar to TR:Q16530 Q16530 PMS3 MRNA ; contains OFR.t1 OFR repetitive element ;
6772	16616	32644	3.27	4.0E-21	AB019676.1	NT	Rattus norvegicus mRNA for rTfM, complete cds
9680	22332	35527	0.63	4.0E-21	U91328.1	NT	Human hereditary haemochromatosis region, histone 2A-like protein gene, hereditary haemochromatosis (HLA-H) gene, R6Ret gene, and sodium phosphate transporter (NPT3) gene, complete cds
9705	22356	35562	0.7	4.0E-21	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
1829	14568	27280	0.94	3.0E-21	AA218891.1	EST_HUMAN	zq15d06.s1 Stratigene fetal retina 937202 Homo sapiens cDNA clone IMAGE:628771 3'
2272	14908	27735	1.24	3.0E-21	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
3078	15843	28485	4.31	3.0E-21	AJ007973.1	NT	Homo sapiens LGMD2B gene
5412	18211	30919	0.68	3.0E-21	AJ277557.1	NT	Homo sapiens dNT-2 gene for mitochondrial 5(3')-deoxyribonucleotidase (dNT-2 gene), exons 1-5
5412	18211	30920	0.68	3.0E-21	AJ277557.1	NT	Homo sapiens dNT-2 gene for mitochondrial 5(3')-deoxyribonucleotidase (dNT-2 gene), exons 1-5

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5652	18447		0.65	3.0E-21	AV661044.1	EST_HUMAN	AV661044 GLC Homo sapiens cDNA clone GLCGOAT0 3'
6096	18964		2.3	3.0E-21	BF184739.1	EST_HUMAN	601844485F1 NIH_MGC_54 Homo sapiens cDNA clone IMAGE:4084945 5'
6099	19451	32489	7.89	3.0E-21	BF361063.1	EST_HUMAN	RC1-OT0083-100800-019-g08 OT0083 Homo sapiens cDNA
9592	22245	35429	1.15	3.0E-21	AW897760.1	EST_HUMAN	CM1-NN0063-280400-203-h08 NN0063 Homo sapiens cDNA
12533	26327	30714	2.86	3.0E-21	AL163213.2	NT	Homo sapiens chromosome 21 segment HS21C013
141	12958		17.18	2.0E-21	BE163247.1	EST_HUMAN	QV3-HT0458-170200-090-g12 HT0458 Homo sapiens cDNA
914	13681	26342	1.85	2.0E-21	AB007857.2	NT	Homo sapiens mRNA for KIAA0397 protein, partial cds
914	13681	26343	1.85	2.0E-21	AB007857.2	NT	Homo sapiens mRNA for KIAA0397 protein, partial cds
1192	13944		2.75	2.0E-21	BE064410.1	EST_HUMAN	RC4-BT0311-141199-011-h08 BT0311 Homo sapiens cDNA
2844	15354	28098	1.98	2.0E-21	Q28983	SWISSPROT	ZONADHESIN PRECURSOR
2844	15354	28099	1.98	2.0E-21	Q28983	SWISSPROT	ZONADHESIN PRECURSOR
5396	18198	30890	1.64	2.0E-21	A1624582.1	EST_HUMAN	ts30903.x1 NCL_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2230109 3' similar to TR:Q99854 Q99854
5489	18288	31184	0.88	2.0E-21	AA027211.1	EST_HUMAN	HYPOPHYSICAL 61.1 KD PROTEIN;
5489	18288	31185	0.88	2.0E-21	AA027211.1	EST_HUMAN	z897a12r1 Soares_fetal_heart_NH119W Homo sapiens cDNA clone IMAGE:368910 5'
8170	20884	33998	0.5	2.0E-21	AJ010770.1	NT	z897a12r1 Soares_fetal_heart_NH119W Homo sapiens cDNA clone IMAGE:368910 5'
8261	20955	34094	6.16	2.0E-21	BE141785.1	EST_HUMAN	Homo sapiens hyperion gene, exons 1-60
8722	21414	34557	3.74	2.0E-21	AU136779.1	EST_HUMAN	QV0-HT0103-091199-050-g11 HT0103 Homo sapiens cDNA
10991	23995		1.55	2.0E-21	BE380127.1	EST_HUMAN	AU136779 PLACE1 Homo sapiens cDNA clone PLACE1005052 5'
11289	23950	37246	1.3	2.0E-21	BE973829.1	EST_HUMAN	MER29 repetitive element;
11289	23950	37247	1.3	2.0E-21	BE973829.1	EST_HUMAN	601680636F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:3951008 5'
12272	24712		9.87	2.0E-21	AF176815.1	NT	601680636F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:3951008 5'
1293	13082	28652	1.8	1.0E-21	AA567657.1	EST_HUMAN	Homo sapiens putative 8-hydroxyguanine DNA glycosylase gene, complete cds
1381	14128		2.82	1.0E-21	A1601284.1	EST_HUMAN	nl46c04.s1 NCL_CGAP_P14 Homo sapiens cDNA clone IMAGE:1043718 similar to contains MER29.b2
6396	19165		2.74	1.0E-21	AL076752.1	EST_HUMAN	MER29 repetitive element;
7092	19781	32847	6.6	1.0E-21	A1223104.1	EST_HUMAN	ar68d12.x1 Barstead ccdm HPLR87 Homo sapiens cDNA clone IMAGE:2152343 3'
10484	23130		1.07	1.0E-21	57300398	NT	DKFZp434i0830_j1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434i0830 5'
4377	17114	28747	5.65	9.0E-22	A1702438.1	EST_HUMAN	ig47a05.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1838336 3' similar to gb:M94241 QM
8502	21194	34336	1.27	9.0E-22	AL163201.2	NT	PROTEIN (HUMAN);
8502	21194	34337	1.27	9.0E-22	AL163201.2	NT	Homo sapiens SET domain and nuclear transposase fusion gene (SETMAR) mRNA
							ts294a03.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2296204 3' similar to TR:Q15408 Q15408
							NEUTRAL PROTEASE LARGE SUBUNIT;
							Homo sapiens chromosome 21 segment HS21C001
							Homo sapiens chromosome 21 segment HS21C001

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10691	23382	36622	2.63	9.0E-22	AV761874.1	EST_HUMAN	AV761874 MDS Homo sapiens cDNA clone MDSGCCG05 5'
11707	24302	37627	1.34	9.0E-22	AU140358.1	EST_HUMAN	AU140358 PLACE2 Homo sapiens cDNA clone PLACE2000394 5'
929	13668		6.55	8.0E-22	BE144748.1	EST_HUMAN	CM0-HT0179-281098-076-H05 HT0179 Homo sapiens cDNA
7787	20482		3.72	8.0E-22	AA046502.1	EST_HUMAN	Z67806.1 Soares pregnant uterus NibHPU Homo sapiens cDNA clone IMAGE:487858 5'
650	13428	26067	5.92	7.0E-22	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
4250	16991	29816	2.21	7.0E-22	O61838	SWISSPROT	ALPHA-2-MACROGLOBULIN PRECURSOR (ALPHA2M)
4977	17700	30307	0.99	7.0E-22	AB008681.1	NT	Homo sapiens gene for activin receptor type IIB, complete cds
8590	21282		1.38	7.0E-22	AF151054.1	NT	Homo sapiens HSPC220 mRNA, complete cds
8731	21423	34668	3.56	7.0E-22	M78590.1	EST_HUMAN	EST00738 Fetal brain, Strategene (cd033206) Homo sapiens cDNA clone HFBGCF07
9502	22155	35335	2.04	7.0E-22	AF009660.1	NT	Homo sapiens T cell receptor beta locus, TORBV7S3A2 to TORBV12S2 region
4038	16783	28413	0.98	6.0E-22	AA406040.1	EST_HUMAN	Z655410.1 Soares testis NHT Homo sapiens cDNA clone IMAGE:742867 5'
8140	20834		1.33	6.0E-22	AW029123.1	EST_HUMAN	w05g07.x1 NCL_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2542812 3'
6424	19182	32189	3.76	5.0E-22	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
10217	22866	36077	7.83	5.0E-22	U60822.1	NT	Human dytrophin (DMD) gene, exons 7, 8 and 9, and partial cds
12498	24854		2.22	5.0E-22	BF476511.1	EST_HUMAN	naa27b06.x1 NCL_CGAP_P128 Homo sapiens cDNA clone IMAGE:3255898 3' similar to contains Alu repetitive element;
3627	19390		0.85	4.0E-22	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
8004	20699	33827	0.45	4.0E-22	AV703223.1	EST_HUMAN	AV703223 ADB Homo sapiens cDNA clone ADBAUE12 5'
8312	25428		3.11	4.0E-22	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
10623	23316	36556	2.47	4.0E-22	BF218030.1	EST_HUMAN	601882813F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4095434 5'
12857	24957		2.06	4.0E-22	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
939	13706		1.58	3.0E-22	A1469679.1	EST_HUMAN	hm14h10.x1 NCL_CGAP_Co14 Homo sapiens cDNA clone IMAGE:2158611 3' similar to gb:U10503 HIGH AFFINITY INTERLEUKIN-8 RECEPTOR B (HUMAN); contains L1.11 L1 repetitive element;
2575	15289	28026	0.92	3.0E-22	A1859038.1	EST_HUMAN	w68504.x1 NCL_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2429839 3' similar to SW:RL21_HUMAN
3882	16415		1.46	3.0E-22	D14718.1	NT	P48778 60S RIBOSOMAL PROTEIN L21.;
4748	17480	30111				NT	Human chromosomal protein HMGI related gene
8129	20823		2.6	3.0E-22	A1090125.1	EST_HUMAN	qb28c07.x1 Soares pregnant uterus NibHPU Homo sapiens cDNA clone IMAGE:1687560 3' similar to contains MER12.12 MER12 repetitive element;
8134	20826	33963	0.8	3.0E-22	BE156613.1	EST_HUMAN	QV0-HT0388-080200-088-F12 HT0388 Homo sapiens cDNA
8258	20952	34088	2.46	3.0E-22	BE089841.1	EST_HUMAN	RC5-BT0707-150300-021-H10 BT0707 Homo sapiens cDNA
8258	20952	34088	0.97	3.0E-22	X60660.1	NT	R.ratus RY2G5 mRNA for a potential ligand-binding protein
8258	20952	34088	0.97	3.0E-22	X60660.1	NT	R.ratus RY2G5 mRNA for a potential ligand-binding protein
1946	14681		2.29	2.0E-22	N24942.1	EST_HUMAN	yx73d05.s1 Soares melanocyte 2NIB-IM Homo sapiens cDNA clone IMAGE:267369 3'
2526	15242	27981	2.15	2.0E-22	P24916	SWISSPROT	IMMEDIATE EARLY GENE 13 PROTEIN PRECURSOR

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3414	16172	28821	4.41	2.0E-22	8394043	NT	Homo sapiens protein kinase, AMP-activated, gamma 3 non-catalytic subunit (PRKAG3), mRNA
4200	18941	29587	1.17	2.0E-22	AW817794.1	EST_HUMAN	PM1-ST0282-26106-001-412 ST0282 Homo sapiens cDNA
5761	25075	31476	1.18	2.0E-22	W39456.1	EST_HUMAN	zc2001.1 Soares_senescent_fibroblasts_NbHSF Homo sapiens cDNA clone IMAGE:322873 5' similar to
6084	18862	31828	3.58	2.0E-22	BF082116.1	EST_HUMAN	gb-X72308 MONOCYTE CHEMOTACTIC PROTEIN 3 PRECURSOR (HUMAN);
9802	22255	35440	1.53	2.0E-22	A1276522.1	EST_HUMAN	RC3-TN0079-150900-025-h12 TN0079 Homo sapiens cDNA
9898	22347	35540	0.89	2.0E-22	AA716315.1	EST_HUMAN	q176h06.x1 Soares_NbHMPu_S1 Homo sapiens cDNA clone IMAGE:1878289 3' similar to contains
9898	22347	35541	0.89	2.0E-22	AA716315.1	EST_HUMAN	MER29.13 MER29 repetitive element;
11761	24352	37884	1.88	2.0E-22	AW418960.1	EST_HUMAN	nv04h11.s1 NCI_CGAP_P222 Homo sapiens cDNA clone IMAGE:1219289 3'
11872	24946	30983	3.71	2.0E-22	AL163280.2	NT	nv04h11.s1 NCI_CGAP_P222 Homo sapiens cDNA clone IMAGE:1219289 3'
1871	14609	27320	1.78	1.0E-22	AW86517.1	EST_HUMAN	ha24f04.x1 NCI_CGAP_K112 Homo sapiens cDNA clone IMAGE:2874655 3'
2588	16302	28038	1.1	1.0E-22	U60871.1	NT	Homo sapiens chromosome 21 segment HS21C080
3406	16163	28814	1.37	1.0E-22	D14547.1	NT	PM4-SN0020-010400-009-H02 SN0020 Homo sapiens cDNA
7641	20306	33415	0.89	1.0E-22	BE084967.1	EST_HUMAN	Human familial Alzheimer's disease (STM2) gene, complete cds
10451	23097	36328	0.79	1.0E-22	A186435.1	EST_HUMAN	Human DNA, SINE repetitive element
10451	23097	36329	0.79	1.0E-22	A186435.1	EST_HUMAN	MRO-BT0659-220200-002-H07 BT0659 Homo sapiens cDNA
12704	24964		5.89	9.0E-23	AW802801.1	EST_HUMAN	qz09b07.x1 NCI_CGAP_CL1.1 Homo sapiens cDNA clone IMAGE:2020981 3' similar to contains MER29.b2
3557	16312	28859	0.79	8.0E-23	AF198349.1	EST_HUMAN	MER29 repetitive element;
3305	16065		2.55	7.0E-23	AV647246.1	EST_HUMAN	IL2-UM0076-070400-061-F11 UM0076 Homo sapiens cDNA
10688	23642	36895	4.16	7.0E-23		NT	Gallus gallus Dec2 protein (Dec2) mRNA, complete cds
3427	16184		1.72	6.0E-23	AF198333.1	NT	AV647248 GLC Homo sapiens cDNA clone GLCAW/C07 3'
4235	16976	28601	1.39	6.0E-23	AL163249.2	NT	Homo sapiens Naf50 (D. melanogaster)-like protein (NOT68L) mRNA
12005	24540	31105	1.5	6.0E-23	AF224699.1	NT	Rattus norvegicus RIM1B (Rim1B) mRNA, complete cds
12005	24540	31106	1.5	6.0E-23	AF224699.1	NT	Homo sapiens chromosome 21 segment HS21C049
12192	24963	31067	3.28	6.0E-23	A1209130.1	EST_HUMAN	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3
5358	18100	30844	4.09	5.0E-23	U82871.2	NT	(UBE2D3) genes, complete cds
							Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3
							qg59c03.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1839400 3' similar to
							SW-MV10 MOUSE P23246 PROTEIN MOV-10;
							Homo sapiens chromosome Xq28 melanoma antigen family A2a (MAGEA2A), melanoma antigen family A12 (MAGEA12), melanoma antigen family A2b (MAGEA2B), melanoma antigen family A3 (MAGEA3), caltractin (CALT), NAD(P)H dehydrogenase-like protein (NSDHL), and LI>

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6146	25086	31863	3.93	6.0E-23	AF179818.1	NT	Pongo pygmaeus olfactory receptor (PPY116) gene, partial cds
7337	25086	31863	3.37	5.0E-23	AF179818.1	NT	Pongo pygmaeus olfactory receptor (PPY116) gene, partial cds
6347	19117	32106	1.34	3.0E-23	AL163227.2	NT	Homo sapiens chromosome 21 segment HS21C027
6347	19117	32107	1.34	3.0E-23	AL163227.2	NT	Homo sapiens chromosome 21 segment HS21C027
7738	20434	33558	4.1	3.0E-23	AA130195.1	EST_HUMAN	z35g08.1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:503968 5' similar to contains MER29.12 MER29 repetitive element;
9148	21879	35045	2.96	3.0E-23	Z70684.1	NT	Human endogenous retroviral element HC2
9148	21879	35046	2.96	3.0E-23	Z70684.1	NT	Human endogenous retroviral element HC2
10215	22863		1.18	3.0E-23	AW897927.1	EST_HUMAN	RC3-NIN0066-270400-011-H01 NIN0068 Homo sapiens cDNA
651	13429	28068	4.25	2.0E-23	AJ289880.1	NT	Homo sapiens KIAA0851 gene (partial), XT3 gene and LZTFL1 gene
1120	15520		3.87	2.0E-23	M55270.1	NT	Human matrix Gla protein (MGP) gene, complete cds
2798	15503	28243	1.98	2.0E-23	P22105	SWISSPROT	TENASCIN-X PRECURSOR (TN-X) (HEXABRACHION-LIKE)
2798	15503	28244	1.98	2.0E-23	P22105	SWISSPROT	TENASCIN-X PRECURSOR (TN-X) (HEXABRACHION-LIKE)
3364	16123		1.46	2.0E-23	AI201458.1	EST_HUMAN	q73f11.x1 NCI_QGAP_P28 Homo sapiens cDNA clone IMAGE:1943757 3' similar to TR:Q13537 Q13537
3705	16458		3.35	2.0E-23	BE165980.1	EST_HUMAN	MER37 TRANSPOSABLE ELEMENT, COMPLETE CONSENSUS SEQUENCE. ;
3958	16707	28348	3.65	2.0E-23	H59931.1	EST_HUMAN	MR3-HT0487-150200-113-q01 HT0487 Homo sapiens cDNA
3958	16707	28347	3.65	2.0E-23	H59931.1	EST_HUMAN	yr18a02.1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:205418 5'
							yr18a02.1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:205418 5'
							4 (CYP3A4) and cytochrome P450 polypeptide 43 (CYP3A43) gene, partial cds; cytochrome P450 polypeptide 4 (CYP3A4) and cytochrome P450 polypeptide 7 (CYP3A7) genes, complete cds; and cytochrome P450 polypeptide 5 (CYP3A5) gene, partial cds
7772	20468		4.3	2.0E-23	AF280107.1	NT	Homo sapiens chromosome 21 segment HS21G103
8742	21434	34579	1.21	2.0E-23	AL163303.2	NT	Human alcohol dehydrogenase gamma subunit (ADH3) gene, exon 1
11991	24530		2.46	2.0E-23	M32668.1	NT	Homo sapiens T cell receptor beta locus, TCRBV7SSA2 to TCRBV12S2 region
12508	24960		2.87	2.0E-23	AF009690.1	NT	Homo sapiens chromosome 21 segment HS21C052
4492	17228	29857	1.1	1.0E-23	AL163262.2	NT	Homo sapiens chromosome 21 segment HS21C010
4714	17448		5.58	1.0E-23	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
6620	18382		3.28	1.0E-23	BE378471.1	EST_HUMAN	601236455F1 NH_MGC 44 Homo sapiens cDNA clone IMAGE:3609653 5'
8254	20948	34095	4.6	1.0E-23	AA448097.1	EST_HUMAN	z462c08.1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:782698 5' similar to contains PTR5.12 PTR5 repetitive element;
10570	23285	36503	2.05	1.0E-23	BE409843.1	EST_HUMAN	601301762F1 NH_MGC 21 Homo sapiens cDNA clone IMAGE:3636254 5'
10570	23285	36504	2.05	1.0E-23	BE409843.1	EST_HUMAN	601301762F1 NH_MGC 21 Homo sapiens cDNA clone IMAGE:3636254 5'
							ab75a08.s1 Strategene fetal retina 937202 Homo sapiens cDNA clone IMAGE:852768 3' similar to
539	13322		1.84	9.0E-24	AA663213.1	EST_HUMAN	TR:E19822 E19822 CA PROTEIN. ;
6357	19127	32121	1.53	8.0E-24	11422027	NT	Homo sapiens capping protein (actin filament) muscle Z-line, alpha 2 (CAPZA2), mRNA

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3853	16003		1.49	7.0E-24	AW937854.1	EST_HUMAN	QV6-DT0047-170200-122-a06 DT0047 Homo sapiens cDNA
5087	17806		0.95	7.0E-24	AL039498.1	EST_HUMAN	DKFZp434A2311_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434A2311 5'
10536	23233		1.33	7.0E-24	AW303317.1	EST_HUMAN	xv1703.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2813405 3' similar to contains Alu repetitive element; contains MER19.12 MER19 repetitive element;
690	13465		2.72	6.0E-24	AB001421.1	NT	Mus musculus fuscata mRNA for Testis-Specific Protein Y (TSPY), complete cds
818	13580	26256	11.74	6.0E-24	AL163249.2	NT	Homo sapiens chromosome 21 segment HS21C049
3953	16703	29342	7.9	5.0E-24	AJ228043.1	NT	Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22, segment 3/3
7657	20321	33430	0.58	5.0E-24	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
11595	24194	37513	1.45	5.0E-24	AW514229.1	EST_HUMAN	h24b03.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2810413 3' similar to TR:O94851
5940	19528	31563	3.85	4.0E-24	AA594178.1	EST_HUMAN	O94851 KIAA0750 PROTEIN;
8581	21273	34411	1.35	4.0E-24	AW819711.1	EST_HUMAN	h31h05.s1 NCI_CGAP_Gas1 Homo sapiens cDNA clone IMAGE:1085529 3' similar to SW:POL_MLVRK
11133	23801	37078	1.95	4.0E-24	BE544822.1	EST_HUMAN	P31795 POL POLYPROTEIN;
12361	24765	31082	4.89	4.0E-24	AB028016.1	NT	RC3-ST0197-130100-014-408 ST0197 Homo sapiens cDNA
12595	24951	30986	1.77	4.0E-24	11418318	NT	601078812F1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3464496 5'
8322	21015		2.85	3.0E-24	AW614871.1	EST_HUMAN	Homo sapiens mRNA for KIAA1093 protein, partial cds
8377	21070		1.57	3.0E-24	AW962076.1	EST_HUMAN	Homo sapiens G-2 and S-phase expressed 1 (GTSE1), mRNA
9365	21940	35114	4.33	3.0E-24	AL163252.2	NT	h68c08.x1 NCI_CGAP_GU1 Homo sapiens cDNA clone IMAGE:2967950 3' similar to contains MER29.b2
12438	24808	31045	1.41	3.0E-24	BF127762.1	EST_HUMAN	MER29 repetitive element;
2346	15069	27806	2.72	2.0E-24	AA167539.1	EST_HUMAN	EST374149 IMAGE resequences, MAGG Homo sapiens cDNA
3779	16531		1.01	2.0E-24	AW898189.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C052
7374	20054	33135	0.81	2.0E-24	AF088824.1	NT	601810449F1 NIH_MGC_46 Homo sapiens cDNA clone IMAGE:4053396 5'
7379	20059	33138	0.65	2.0E-24	AJ003638.1	EST_HUMAN	zp11f08.r1 Stragene fetal retina 037202 Homo sapiens cDNA clone IMAGE:609161 5'
8639	21331	34476	3.28	2.0E-24	AL119158.1	EST_HUMAN	RC3-NN0068-090500-021-b03 NN0068 Homo sapiens cDNA
8676	21388		0.88	2.0E-24	H68214.1	EST_HUMAN	Mus musculus rho/rao-interacting citron kinase (Crik) mRNA, complete cds
9754	22405	35611	0.94	2.0E-24	AJ521759.1	EST_HUMAN	AJ003636 Selected chromosome 21 cDNA library/Homo sapiens cDNA clone MIP1p12-5H13
9754	22405	35612	0.94	2.0E-24	AJ521759.1	EST_HUMAN	DKFZp761L1712_r1 761 (synonym: hary2) Homo sapiens cDNA clone DKFZp761L1712 5'
11825	24409	37744	1.31	2.0E-24	AW868552.1	EST_HUMAN	yr92b09.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:212729 5' similar to contains
11825	24409	37745	1.31	2.0E-24	AW868552.1	EST_HUMAN	MER28 repetitive element;
12281	25377		7.44	2.0E-24	M28877.1	NT	BT7a09.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2138008 3'
							BT7a09.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2138008 3'
							MR1-SN0063-040500-001-a06 SN0063 Homo sapiens cDNA
							MR1-SN0063-040500-001-a06 SN0063 Homo sapiens cDNA
							Human O family dispersed repeat element



Table 4  
Single Exon Probes Expressed In Brain

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1691	14435	27131	2.89	1.0E-24	7706340	NT	Homo sapiens CGI-127 protein (LOC51646), mRNA
2679	15388		1.63	1.0E-24	AW820194.1	EST_HUMAN	QVQ-ST0284-100400-185-c10 ST0284 Homo sapiens cDNA
3020	15788	28433	1.49	1.0E-24	D86423.1	NT	Mus musculus mRNA for HGT keratin, partial cds
4237	16978		1.71	1.0E-24	AF143313.1	NT	Homo sapiens PTEN (PTEN) gene, exon 2
7447	20123	33214	4.32	1.0E-24	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
7630	20236	33404	0.81	1.0E-24	BE144628.1	EST_HUMAN	MRO-HT0166-271169-006-d08 HT0166 Homo sapiens cDNA
7845	20540	33667	2.08	1.0E-24	AW901184.1	EST_HUMAN	CMO-NIN1010-130300-281-d07 NIN1010 Homo sapiens cDNA
11899	24294	37619	1.31	9.0E-25	7706707	NT	Homo sapiens putative secreted protein (SIG11), mRNA
4939	17667	30275	2.33	7.0E-25	AA483944.1	EST_HUMAN	nc02e10.s1 NCI_CGAP_Kid1 Homo sapiens cDNA clone IMAGE:911754 similar to contains MER1.b2 MER1 repetitive element;
8117	20811	33946	6.59	7.0E-25	AA468648.1	EST_HUMAN	nc08a09.s1 NCI_CGAP_Co3 Homo sapiens cDNA clone IMAGE:880408 3' similar to contains THR.b2 THR repetitive element;
11701	24298	37622	3.28	7.0E-25	AA583540.1	EST_HUMAN	nf25h06.s1 NCI_CGAP_P1 Homo sapiens cDNA clone IMAGE:914843 similar to SW:R14A_YEAST
6893	17989		4.9	6.0E-25	W87823.1	EST_HUMAN	P96105 PROBABLE 60S RIBOSOMAL PROTEIN L14EA;
7622	20288	33397	8.34	6.0E-25		EST_HUMAN	zh65h07.f1 Soares fetal_liver_spleen_1NFLS S1 Homo sapiens cDNA clone IMAGE:416989 5'
1647	14393	27083	1.18	5.0E-25	AW850271.1	EST_HUMAN	Mus musculus obogelin (Obog), mRNA
11286	23947	37242	2.44	5.0E-25	AW979107.1	EST_HUMAN	IL3-CT0219-161189-031-D04 CT0219 Homo sapiens cDNA
1429	14176	26881	2.25	4.0E-25	T08107.1	EST_HUMAN	EST391217 MAGC resequences, MAGP Homo sapiens cDNA
3397	16155		3.04	4.0E-25	AW887671.1	EST_HUMAN	ye55h04.f1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:121783 5'
4282	17021		2.93	4.0E-25	BE170657.1	EST_HUMAN	PM3-OT0093-280200-001-g07 OT0093 Homo sapiens cDNA
3314	16074	28724	3.98	3.0E-25	8923321	NT	QV3-HT0543-140400-149-e11 HT0543 Homo sapiens cDNA
3314	16074	28725	3.98	3.0E-25	8923321	NT	Homo sapiens hypothetical protein FLJ20344 (FLJ20344), mRNA
4837	17598	30190	0.75	3.0E-25	P29622	SWISSPROT	Homo sapiens hypothetical protein FLJ20344 (FLJ20344), mRNA
6518	19284	32288	0.6	3.0E-25	AA603560.1	EST_HUMAN	KALLISTATIN PRECURSOR (KALLIKREIN INHIBITOR) (PROTEASE INHIBITOR 4)
8235	20929	34065	4.86	3.0E-25	AL163210.2	NT	np27b02.s1 NCI_CGAP_P122 Homo sapiens cDNA clone IMAGE:1117515 3' similar to gb:M61866 ZINC FINGER PROTEIN 85 (HUMAN);
10959	23635	36886	1.99	3.0E-25	AA678013.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C010
1326	14075	26749	2.94	2.0E-25	5032158	NT	repetitive element;
2306	15031	27768	6.42	2.0E-25	BE889016.1	EST_HUMAN	Homo sapiens transducin (beta)-like 1 (TBL1) mRNA
2835	15259	27997	3.67	2.0E-25	P17008	SWISSPROT	601511530F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3913087 5'
4167	16907	28535	1.76	2.0E-25	P17008	SWISSPROT	40S RIBOSOMAL PROTEIN S16
4167	16907	28536	1.76	2.0E-25	P17008	SWISSPROT	40S RIBOSOMAL PROTEIN S16

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9665	22317	35514	1.94	2.0E-25	AL449573.1	EST_HUMAN	AL449573 Homo sapiens Testis (Stratides GS) Homo sapiens cDNA
355	13153	25794	1.03	1.0E-25	AL040228.1	EST_HUMAN	DKFZp434f-H0313.1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434f-H0313.5
1226	13978		2.02	1.0E-25	9635487	NT	Human endogenous retrovirus, complete genome
2435	15156	27860	1.03	1.0E-25	Q08055	SWISSPROT	ATP SYNTHASE LIPID-BINDING PROTEIN P2 PRECURSOR (ATPASE PROTEIN 9) (SUBUNIT C)
4806	17537	30160	2.84	1.0E-25	BE162737.1	EST_HUMAN	PM1-HT0454-080100-002-H09 HT0454 Homo sapiens cDNA
6472	19239		0.79	1.0E-25	AA189080.1	EST_HUMAN	z045006.s1 Stratigene HNT neuron (#937233) Homo sapiens cDNA clone IMAGE:632627 3' similar to contains Alu repetitive element
6889	25100	32857	3.14	1.0E-25	AA582880.1	EST_HUMAN	nt54h11.s1 NCL CGAP_Kid6 Homo sapiens cDNA clone IMAGE:1087749 3'
7814	20509	33833	4.03	1.0E-25	AA706078.1	EST_HUMAN	z08004.s1 Soares_fetal_heart_NbHH10W Homo sapiens cDNA clone IMAGE:384822 3' similar to contains PTR5.13 PTR5 repetitive element
9446	22123	35302	0.75	1.0E-25	X60660.1	NT	R ratius RY2G5 mRNA for a potential ligand-binding protein
9446	22123	35303	0.75	1.0E-25	X60660.1	NT	R ratius RY2G5 mRNA for a potential ligand-binding protein
10890	23570	36821	3.06	1.0E-25	U93163.1	NT	Homo sapiens IMAGE-B2 (IMAGE-B2), IMAGE-B3 (IMAGE-B3), IMAGE-B4 (IMAGE-B4), and IMAGE-B1 (IMAGE-B1) genes, complete cds
12788	25024		2.18	1.0E-25	X51755.1	NT	Human lambda-Immunoglobulin constant region complex (germline)
2437	15204	27845	1.41	9.0E-26	AL163218.2	NT	Homo sapiens chromosome 21 segment HS21C018
5607	18403		1.99	8.0E-26	D14547.1	NT	Human DNA, SINE repetitive element
1571	14318	27003	1.72	7.0E-26	AF003528.1	NT	Homo sapiens X-linked antihistatic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
3982	18711	28351	1.23	7.0E-26	X89211.1	NT	H. sapiens DNA for endogenous retroviral like element
4138	18880	29508	2.27	7.0E-26	AW340153.1	EST_HUMAN	hd02a12.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2808366 3'
5551	18348	31257	0.82	7.0E-26	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
11889	24284		8.45	7.0E-26	AA115885.1	EST_HUMAN	zn30d08.r1 Stratigene neuroepithelium NT2RAMI 837234 Homo sapiens cDNA clone IMAGE:548943 5' similar to gb:M14338 VITAMIN K-DEPENDENT PROTEIN S PRECURSOR (HUMAN);
12547	24885		1.94	7.0E-26	AW954559.1	EST_HUMAN	EST366623 IMAGE resequences, MAGC Homo sapiens cDNA
2222	14950	27889	2.04	6.0E-26	AF028308.1	NT	Homo sapiens chromosome 9 duplication of the T cell receptor beta locus and tyrosinogen gene families
3341	16100	28752	0.95	6.0E-26	AA208191.1	EST_HUMAN	z052h04.r1 Stratigene neuroepithelium (#937231) Homo sapiens cDNA clone IMAGE:845271 5'
10432	23078	36301	0.88	6.0E-26	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
10432	23078	36302	0.88	6.0E-26	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
11883	24278	37800	2.03	6.0E-26	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
1154	13909	28572	3.61	6.0E-26	A1708235.1	EST_HUMAN	as39h08.x1 Barstead aorta HPLRB8 Homo sapiens cDNA clone IMAGE:2319519 3' similar to WP:FA9C12.11 CE03371;

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1154	13909	26573	3.61	5.0E-26	A1708235.1	EST_HUMAN	es30108.x1 Barstead aorta HPLRB8 Homo sapiens cDNA clone IMAGE:2310519 3' similar to WP:F49C12.11 CE03371;
1635	14282		1.4	4.0E-26	AA320648.1	EST_HUMAN	EST33446 Embryo, 12 week II Homo sapiens cDNA 5' end
9312	21979		3.72	4.0E-26	7657670	NT	Homo sapiens upstream binding transcription factor, RNA polymerase I (UBTF), mRNA
10558	23254	36491	2.75	4.0E-26	BE266187.1	EST_HUMAN	601191345F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3535210 5'
1753	14495	27194	1.21	3.0E-26	D14547.1	NT	Human DNA, SINE repetitive element
1998	14732	27454	1.31	3.0E-26	ALD45855.2	EST_HUMAN	DKFZp4341066_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp4341066 5'
2025	14760		3.15	3.0E-26	AA115895.1	EST_HUMAN	zn30408.r1 Stratigene neuroepithelium NT2RAMI 937234 Homo sapiens cDNA clone IMAGE:548943 5' similar to gb:M14338 VITAMIN K-DEPENDENT PROTEIN S PRECURSOR (HUMAN);
3760	16512	29148	1.04	3.0E-26	AA152494.1	EST_HUMAN	zn30110.r1 Stratigene colon (#937204) Homo sapiens cDNA clone IMAGE:588427 5' similar to TR:G695374
3760	16512	29149	1.04	3.0E-26	AA152494.1	EST_HUMAN	G695374 THYROID RECEPTOR INTERACTOR;
6811	19472	32495	1.78	3.0E-26	BF245458.1	EST_HUMAN	601894963F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4083278 5'
10626	23319		1.42	3.0E-26	AF036405.1	NT	Homo sapiens MLL (MLL) gene, exons 1-3, and partial cds
11559	24158	37469	1.83	3.0E-26	AW876661.1	EST_HUMAN	QV2-PT0012-040400-124-e05 PT0012 Homo sapiens cDNA
11569	24158	37469	1.83	3.0E-26	AW876661.1	EST_HUMAN	QV2-PT0012-040400-124-e05 PT0012 Homo sapiens cDNA
11602	24201	37523	6.56	3.0E-26	AA583173.1	EST_HUMAN	tn37405.s1 NCI_CGAP_G05 Homo sapiens cDNA clone IMAGE:1080057 3' similar to contains OFR.H
11858	24442	37783	1.36	3.0E-26	AF228925.1	NT	OFR repetitive element;
						NT	Mus musculus harmonin isoform b3 (Ush1c) mRNA, complete cds, alternatively spliced
12724	24985		2.82	3.0E-26	AW073434.1	EST_HUMAN	xs57609.x1 NCI_CGAP_HSC2 Homo sapiens cDNA clone IMAGE:2670873 3' similar to contains MER30.H
696	13442	26063	6.76	2.0E-26	AL163282.2	NT	MER30 repetitive element;
1861	14599		3.07	2.0E-26	AL038099.2	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C082
3226	16988	28842	6.89	2.0E-26	X86694.1	NT	DKFZp506L171.s1 506 (synonym: htkd2) Homo sapiens cDNA clone DKFZp506L171 3'
5147	17868		1.09	2.0E-26	AF073482.1	NT	M.musculus mRNA for astrocytic phosphoprotein, PEAK-15
10653	23344		2.7	2.0E-26	D87675.1	NT	Homo sapiens myoblastin related protein 7 mRNA, partial cds
						NT	Homo sapiens DNA for amyloid precursor protein, complete cds
11180	23848	37132	3	2.0E-26	A801412.1	EST_HUMAN	ts08a01.x1 NCI_CGAP_Ges4 Homo sapiens cDNA clone IMAGE:2185416 3' similar to contains Alu
11396	24001		2.45	2.0E-26	AF055098.1	NT	repetitive element; contains element MER20 MER20 repetitive element;
12106	24003		1.57	2.0E-26	AB037859.1	NT	Homo sapiens MHC class 1 region
133	12948	25591	5.18	1.0E-26	BE170371.1	EST_HUMAN	Homo sapiens mRNA for KIAA1438 protein, partial cds
2040	14774	27503	1.37	1.0E-26	AL039363.2	EST_HUMAN	QV4-HT0538-020300-123-e02 HT0538 Homo sapiens cDNA
2693	15402		9.04	1.0E-26	AF261085.1	NT	DKFZp434H1910_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434H1910 5'
						NT	Homo sapiens glyceraldehyde-3-phosphate dehydrogenase (GADPH) mRNA, complete cds

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6740	19574		3.05	1.0E-28	BE165980.1	EST_HUMAN	MR3-UT0487-150200-113-g01 HT0487 Homo sapiens cDNA
10809	23462		2.21	1.0E-26	AL038487.1	EST_HUMAN	DKFZp568C2146_r1 568 (synonym: hfd2) Homo sapiens cDNA clone DKFZp568C2146 5'
12348	26395		3.53	1.0E-26	H55093.1	EST_HUMAN	CHR220032 Chromosome 22 exon Homo sapiens cDNA clone C22_45 5'
7484	20156		1.11	9.0E-27	BF371227.1	EST_HUMAN	RC8-FN0138-110800-022-A02 FN0138 Homo sapiens cDNA
9203	22082		4.14	9.0E-27	U93163.1	NT	Homo sapiens IMAGE-B2 (MAGE-B2), MAGE-B3 (MAGE-B3), MAGE-B4 (MAGE-B4), and MAGE-B1 (MAGE-B1) genes, complete cds
11875	24454		5.72	9.0E-27	BF445558.1	EST_HUMAN	head3c07.x1 NCI_CGAP_P28 Homo sapiens cDNA clone IMAGE:3253944 3' similar to contains OFR.11 OFR repetitive element;
10	12837	25450	3.83	8.0E-27	AI831462.1	EST_HUMAN	W49c04.x1 NCI_CGAP_Lu19 Homo sapiens cDNA clone IMAGE:2406150 3' similar to contains THR.b2 THR repetitive element;
544	13327		4.33	8.0E-27	AL163227.2	NT	Homo sapiens chromosome 21 segment HS21C027
1395	14142	26819	59.39	8.0E-27	AW162737.1	EST_HUMAN	eu87h08.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2783295 3' similar to gb:K00558 TUBULIN ALPHA-1 CHAIN (HUMAN);
1395	14142	26820	59.39	8.0E-27	AW162737.1	EST_HUMAN	eu87h08.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2783295 3' similar to gb:K00558 TUBULIN ALPHA-1 CHAIN (HUMAN);
2164	14893	27629	1.37	8.0E-27	AW864778.1	EST_HUMAN	PM2-SN0018-220300-002-407 SN0018 Homo sapiens cDNA
3180	15943	28594	1.81	8.0E-27	P12236	SWISSPROT	ADP ATP CARRIER PROTEIN, LIVER ISOFORM T2 (ADP/ATP TRANSLOCASE 3) (ADENINE NUCLEOTIDE TRANSLOCATOR 3) (ANT 3)
3348	16107	28762	0.81	8.0E-27	AF181897.1	NT	Homo sapiens WRN (WRN) gene, complete cds
5608	18404	31317	1.02	8.0E-27	AV732214.1	EST_HUMAN	AV732214 HTF Homo sapiens cDNA clone HTFBC808 5'
6881	17957		2.63	8.0E-27	BE926560.1	EST_HUMAN	MR4-BT0398-250800-204-d08 BT0398 Homo sapiens cDNA
6947	19428	32444	2.29	8.0E-27	N84970.1	EST_HUMAN	J1751F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA clone J1751 5' similar to REPETITIVE ELEMENT L1
9109	21797	34961	1.51	8.0E-27	AW857579.1	EST_HUMAN	GM1-CT0315-091298-063-d07 CT0315 Homo sapiens cDNA
9109	21797	34982	1.51	8.0E-27	AW857579.1	EST_HUMAN	GM1-CT0315-091298-063-d07 CT0315 Homo sapiens cDNA
668	13444		1.23	7.0E-27	Z70804.1	NT	Human endogenous retroviral element HC2
5030	17750		2.25	7.0E-27	AW629172.1	EST_HUMAN	h51h12.x1 Source_NFL_T_OBC_S1 Homo sapiens cDNA clone IMAGE:2876879 3' similar to TR:O76040 O76040 ORF2 FUNCTION UNKNOWN.;
8756	21448		1.19	7.0E-27	D68984.1	NT	Human mRNA for KIAA0231 gene, partial cds
10650	23341		4.26	7.0E-27	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
12484	24843		2.12	7.0E-27	AV723365.1	EST_HUMAN	AV723365 HTB Homo sapiens cDNA clone HTBAHE02 5'
10627	23320	36558	2.75	6.0E-27	M26897.1	NT	Human nuclear protein (B23) mRNA, complete cds
11804	24394	37728	1.57	6.0E-27	U93163.1	NT	Homo sapiens MAGE-B2 (MAGE-B2), MAGE-B3 (MAGE-B3), MAGE-B4 (MAGE-B4), and MAGE-B1 (MAGE-B1) genes, complete cds

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10137	22785	35986	2.82	5.0E-27	BF060614.1	EST_HUMAN	602121491F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4278527 5'
10137	22785	35987	2.82	5.0E-27	BF060614.1	EST_HUMAN	602121491F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4278527 5'
6845	19407	32421	1.85	4.0E-27	9910569	NT	Mus musculus sperm tail associated protein (Stap), mRNA
7840	20535		1.07	4.0E-27	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
7863	20578		1.54	4.0E-27	AF078779.1	NT	Rattus norvegicus putative four repeat ion channel mRNA, complete cds
9844	22298	35481	0.7	4.0E-27	AW880859.1	EST_HUMAN	QV0-OT0033-070300-152-b10 OT0033 Homo sapiens cDNA
11804	24203	37525	1.98	4.0E-27	X89211.1	NT	H. sapiens DNA for endogenous retroviral like element
2034	14769	27489	4.61	3.0E-27	X60658.1	NT	R. rattus RY43 mRNA for a potential ligand-binding protein
4238	16979	29604	1.06	3.0E-27	BE071924.1	EST_HUMAN	PM0-BT0527-090100-001-d11 BT0527 Homo sapiens cDNA
5262	18068	30697	6.24	3.0E-27	AA077705.1	EST_HUMAN	7B44C08 Chromosome 7 Fetal Brain cDNA Library Homo sapiens cDNA clone 7B44C08
7888	20381	33475	0.63	3.0E-27	BE070351.1	EST_HUMAN	763302x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3284283 3'
9205	22084	35256	2.93	3.0E-27	BF035327.1	EST_HUMAN	60145853F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3882088 5'
40	12868	25487	14.84	2.0E-27	AF054187.1	NT	Homo sapiens alpha NAC mRNA, complete cds
1888	14825		5.12	2.0E-27	AA565345.1	EST_HUMAN	h01b10.s1 NCL_CGAP_P111 Homo sapiens cDNA clone IMAGE:1000689 similar to gb:M17886 60S
3107	15872		10.39	2.0E-27	AW629172.1	EST_HUMAN	h151h12.x1 Scores_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2975879 3' similar to TR:O76040 O76040 ORF2: FUNCTION UNKNOWN. ;
3218	15981	28632	1.96	2.0E-27	AF111167.2	NT	Homo sapiens jun dimerization protein gene, partial cds; cfos gene, complete cds; and unknown gene
3218	15981	28633	1.96	2.0E-27	AF111167.2	NT	Homo sapiens jun dimerization protein gene, partial cds; cfos gene, complete cds; and unknown gene
4000	16755	29395	1.36	2.0E-27	AF000368.1	NT	Rattus norvegicus voltage-gated sodium channel mRNA, complete cds
8577	19340	32383	0.61	2.0E-27	H02855.1	EST_HUMAN	y38e01.r1 Scores placenta Nb21P Homo sapiens cDNA clone IMAGE:150840 5' similar to SP:HMGC_MOUSE Q02891 HOMEBOX PROTEIN ;
7989	20684	33810	1.65	2.0E-27	A1888347.1	EST_HUMAN	w28g07.x1 NCL_CGAP_U11 Homo sapiens cDNA clone IMAGE:2428268 3'
9169	21839		2.3	2.0E-27	AA551527.1	EST_HUMAN	h08h05.s1 NCL_CGAP_Thy1 Homo sapiens cDNA clone IMAGE:843737 similar to contains L1.13 L1 repetitive element ;
9981	22342	35536	0.76	2.0E-27	X60658.1	NT	R. rattus RY43 mRNA for a potential ligand-binding protein
9935	22583	35782	1.28	2.0E-27	M78590.1	EST_HUMAN	EST00738 Fetal brain, Stragene (cat#636206) Homo sapiens cDNA clone HFBCF07
9935	22583	35783	1.28	2.0E-27	M78590.1	EST_HUMAN	EST00738 Fetal brain, Stragene (cat#636206) Homo sapiens cDNA clone HFBCF07
10875	23535	36802	4.11	2.0E-27	AU121695.1	EST_HUMAN	AU121695 MAMMA1 Homo sapiens cDNA clone MAMMA1000746 5'
11469	14825		3.31	2.0E-27	AA565345.1	EST_HUMAN	h01b10.s1 NCL_CGAP_P111 Homo sapiens cDNA clone IMAGE:1000689 similar to gb:M17886 60S
426	13212		1.51	1.0E-27	AL163246.2	NT	ACIDIC RIBOSOMAL PROTEIN P1 (HUMAN); Homo sapiens chromosome 21 segment HS21C046

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Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
978	13741	26404	1.34	1.0E-27	AB026898.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
4061	16906		0.98	1.0E-27	BE360127.1	EST_HUMAN	h09g01.x1 NCI_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3146258 3' similar to contains MER29 b3
8449	19217	32215	0.28	1.0E-27	0006855	NT	MER29 repetitive element;
6771	19515	32542	1.98	1.0E-27	F30158.1	EST_HUMAN	Homo sapiens Refine-derived POU-domain factor-1 (RPF-1), mRNA
6771	19515	32543	1.98	1.0E-27	F30158.1	EST_HUMAN	HSPD20461 HM3 Homo sapiens cDNA clone s4000085C10
8508	21200	34346	0.98	1.0E-27	AB007823.1	NT	HSPD20461 HM3 Homo sapiens cDNA clone s4000095C10
8884	21575		2.28	1.0E-27	BE079780.1	EST_HUMAN	Homo sapiens mRNA for KIAA0454 protein, partial cds
9822	22275	35463	2.55	1.0E-27	D87449.1	NT	RC8-BT0627-140200-011-E08 BT0627 Homo sapiens cDNA
11704	24298	37825	3.51	1.0E-27	AF111053.1	NT	Human mRNA for KIAA0280 gene, partial cds
137	12951		2.94	9.0E-28	BE348390.1	EST_HUMAN	Bos taurus letraphilin 3 splice variant boeh mRNA, complete cds
303	13107	25747	3.31	9.0E-28	AU126280.1	EST_HUMAN	hwt17c1.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3183188 3' similar to TR:Q07314 Q07314
10289	22937	36150	0.63	9.0E-28	AA174078.1	EST_HUMAN	SECRETED NEUREXIN III-ALPHA-C PRECURSOR, [3] TR:Q07280 TR:Q07313 ;
11951	24504		4.85	9.0E-28	BF377850.1	EST_HUMAN	AU126280 NT2RP1 Homo sapiens cDNA clone NT2RP100443.5'
12286	25245		2.46	8.0E-28	AW157571.1	EST_HUMAN	zp18g12.a1 Stralagene fetal retina 837202 Homo sapiens cDNA clone IMAGE:609862 3'
1158	13913	26578	7.89	7.0E-28	AU142750.1	EST_HUMAN	CM2-TN0140-070900-372-g01 TN0140 Homo sapiens cDNA
11142	23809	37089	3.36	7.0E-28	11417866	NT	au83h08.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2782911 3' similar to
11910	24474		2.78	7.0E-28	AV735348.1	EST_HUMAN	TR:O00302 O00302 KIAA0555 PROTEIN, contains element MER22 repetitive element ;
8817	21509		0.97	6.0E-28	AF016052.1	NT	AU142750 Y78AA1 Homo sapiens cDNA clone Y78AA1000824 5'
12528	24873		2.35	6.0E-28	AA504562.1	EST_HUMAN	Homo sapiens gamma-glutamyltransferase-like activity 1 (GGTLA1), mRNA
310	13114		4.19	5.0E-28	A021003.1	EST_HUMAN	AV735348 CB Homo sapiens cDNA clone CBFACA12 5'
3090	16738	29372	1.44	5.0E-28	R79782.1	EST_HUMAN	Homo sapiens zinc finger protein ZNF191 (ZNF191) gene, complete cds
2631	15343	28087	1.68	4.0E-28	AW195066.1	EST_HUMAN	Homo sapiens repetitive element PTR5 repetitive element ;
2876	15742	28389	0.78	4.0E-28	4505316	NT	rep18c07.x1 NCI_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2455582 3' similar to contains THR.b1
3106	15871	28511	2.52	4.0E-28	BE409100.1	EST_HUMAN	y89f10.r1 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:148443 5'
7230	18915	32988	1.93	4.0E-28	A1108941.1	EST_HUMAN	xt33c08.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2695504 3' similar to SW:GG95_HUMAN
							Q08379 GOLGIN-93 ;
							Homo sapiens myosin phosphatase, target subunit 1 (MYPT1), mRNA
							601300703F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3635305 5'
							q08f10.x1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1755019 3' similar to gb:M19503 LINE-1
							REVERSE TRANSCRIPTASE HOMOLOG (HUMAN);

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10774	23457		3.08	4.0E-28	AF029308.1	NT	Homo sapiens chromosome 9 duplication of the T cell receptor beta locus and tryptophan gene families
10828	23608		17.24	4.0E-28	AB038241.1	NT	Felis catus GAPDH mRNA for glyceraldehyde-3-phosphate dehydrogenase, complete cds
10950	19916	32988	4.75	4.0E-28	AI108941.1	EST_HUMAN	qf86f10.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1755019 3' similar to gbM19503 LINE-1
12312	24734		1.84	4.0E-28	AW854244.1	EST_HUMAN	REVERSE TRANSCRIPTASE HOMOLOG (HUMAN);
1280	14009		2.88	3.0E-28	AF158382.1	NT	RC3-CT0254-240400-210-112 CT0254 Homo sapiens cDNA
5051	17770		1.05	3.0E-28	AF009860.1	NT	Homo sapiens metalloprotease-like, disintegrin-like, cysteine-rich protein 2 epsilon (ADAM22) mRNA, complete cds
8728	21418	34502	1.89	3.0E-28	BF354030.1	EST_HUMAN	Homo sapiens T cell receptor beta locus, TORBV7S3A2 to TORBV12S2 region
10853	23533	36778	2.09	3.0E-28	U53598.1	NT	MR3-HT0713-280500-013-009 HT0713 Homo sapiens cDNA
12344	24751		3.62	3.0E-28	AB31901.1	EST_HUMAN	Homo sapiens MHC class 1 region
87	12913	25561	10.6	2.0E-28	BE062167.1	EST_HUMAN	wj98707.x1 NCI CGAP_Lym12 Homo sapiens cDNA clone IMAGE:2410885 3' similar to contains Alu repetitive element contains element HGR repetitive element ;
1023	13783	28444	0.86	2.0E-28	4501912	NT	RC1-BT0254-220300-019-c05 BT0254 Homo sapiens cDNA
1142	13897	26558	16.03	2.0E-28	Y11107.3	NT	Homo sapiens a disintegrin and metalloprotease domain 23 (ADAM23) mRNA
2481	15199	27639	2.1	2.0E-28	AB48934.1	EST_HUMAN	Homo sapiens ITGB4 gene for integrin beta 4 subunit, exons 3-41
6215	18989	31988	1.33	2.0E-28	BF224402.1	EST_HUMAN	qp35b06.x1 NCI CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1910483 3' similar to contains L1.b2 L1 repetitive element ;
8238	19012		5.07	2.0E-28	BF212905.1	EST_HUMAN	tr76-c03.x1 NCI CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3134404 3' similar to contains LOR1.b1 LOR1 repetitive element ;
7943	20038	33766	0.71	2.0E-28	AF008273.1	NT	601814186F1 NIH_MGC_64 Homo sapiens cDNA clone IMAGE:4048761 5'
9484	22137		5.54	2.0E-28	AW872305.1	EST_HUMAN	Sus scrofa domestica submaxillary apomucin mRNA, complete cds
11614	24212	37538	1.84	2.0E-28	AF224698.1	NT	EST384394 MAGe reassessances, MAGL Homo sapiens cDNA
12322	24741		2.22	2.0E-28	H06378.1	EST_HUMAN	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
1461	14208	26895	2.84	1.0E-28	D38044.1	NT	y79c08.r1 Soares Infant brain 1N1B Homo sapiens cDNA clone IMAGE:44300 5'
2217	14945	27665	2.37	1.0E-28	BF333236.1	EST_HUMAN	Human gene for A1-receptor, exon 7-9
7769	20455		3.2	1.0E-28	11429895	NT	QV1-BT0821-120900-360-503 BT0821 Homo sapiens cDNA
7917	20812		3.3	1.0E-28	8922793	NT	Homo sapiens similar to ribosomal protein L12 (H. sapiens) (LOC33091), mRNA
9178	21848	35014	4.84	1.0E-28	AA308744.1	EST_HUMAN	Homo sapiens hypopharyngeal protein FLJ10968 (FLJ10968), mRNA
9776	22427	35633	8.73	1.0E-28	4769431	NT	EST179815 HCC cell line (metastasis to liver in mouse) II Homo sapiens cDNA 5' and similar to similar to retroviral LTR
9776	22427	35634	8.73	1.0E-28	4769431	NT	Homo sapiens gamma-glutamyltransferase-like activity 1 (GGT1A1), mRNA

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10422	23068		0.83	1.0E-28	AU146356.1	EST_HUMAN	AU146356 NT2RM4 Homo sapiens cDNA clone NT2RM4002146 3'
11915	24478		7.79	1.0E-28	AA054182.1	EST_HUMAN	z151c01.1 Soares retina N2b4HR Homo sapiens cDNA clone IMAGE:380448 5'
12651	25143		1.88	1.0E-28	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
12749	25346	30603	3.18	9.0E-29	AW663987.1	EST_HUMAN	h178g06.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2878268 3'
12436	24806		3.32	8.0E-28	Q00130	SWISSPROT	HYPOTHETICAL GENE 50 PROTEIN
1568	14344	27034	1.37	7.0E-29	AW986447.1	EST_HUMAN	EST378521 IMAGE: ressequenza, MAGI Homo sapiens cDNA
12794	25045		7.13	7.0E-29	AJ12352.1	NT	Rattus norvegicus mRNA for 45 kDa secretory protein, partial
581	13361	25989	16.66	6.0E-29	A1936748.1	EST_HUMAN	wp68b01.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2466885 3' similar to TR:O15475
12201	24689		8.09	6.0E-29	BE940436.1	EST_HUMAN	O15475 UNNAMED HERV-H PROTEIN; contains LTR7.b1 LTR7 repetitive element;
12286	24717		1.72	6.0E-29	BF568097.1	EST_HUMAN	RC3-UT0062-210800-021-c06 UT0062 Homo sapiens cDNA
8630	21322		5.36	5.0E-29	AW887541.1	EST_HUMAN	602184092F1 NIH_MGC_42 Homo sapiens cDNA clone IMAGE:4300079 5'
3226	15989		1.84	4.0E-29	A1782387.1	EST_HUMAN	RC3-OT0091-170300-011-c12 OT0091 Homo sapiens cDNA
5919	18704		7.91	4.0E-29	BE164930.1	EST_HUMAN	cn15c02.x1 Normal Human Trabecular Bone Cells Homo sapiens cDNA clone NHTBC_cn15c02 random
7979	20874	33797	0.55	4.0E-29	A1678101.1	EST_HUMAN	QV1-HT0471-280300-121-e05 HT0471 Homo sapiens cDNA
7979	20874	33798	0.55	4.0E-29	A1678101.1	EST_HUMAN	wd35g06.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2330170 3' similar to contains
8844	21398	34480	6.21	4.0E-29	J04988.1	NT	MER29.12 MER29 repetitive element;
4381	17118	29751	1.4	3.0E-29	AB042297.1	NT	Human 90 kD heat shock protein gene, complete cds
4684	17418	30054	1.07	3.0E-29	BF332336.1	EST_HUMAN	Homo sapiens PTS gene for $\beta$ -pyruvylhydroxylation synthase, complete cds
8841	18629	31584	1.18	3.0E-29	BE314018.1	EST_HUMAN	QV1-BT0821-120000-380-503 BT0821 Homo sapiens cDNA
8832	21324	34465	2.87	3.0E-29	D38044.1	NT	601162867F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3508627 5'
9200	21860	36034	1.80	3.0E-29	AW303317.1	EST_HUMAN	Human gene for ATR-receptor, exon 7-9
8431	22109		1.87	3.0E-29	AL163246.2	NT	xv1703.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2813405 3' similar to contains Alu
9859	22509		0.61	3.0E-29	BE350127.1	EST_HUMAN	repetitive element; contains MER19.12 MER19 repetitive element;
11235	23898	37185	1.47	3.0E-29	AA403083.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C046
12102	24900		1.53	3.0E-29	D63882.1	NT	h109g01.x1 NCI_CGAP_J0413 Homo sapiens cDNA clone IMAGE:3148256 3' similar to contains MER29.13
12789	25378		7.53	3.0E-29	AA016177.1	EST_HUMAN	MER29 repetitive element;
480	13265	25600	1.72	2.0E-29	AF084698.1	NT	z162b01.1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:726889 5' similar to TR:G1335769
							G1335769 GAG-POL POLYPROTEIN;
							Human HsLIM15 mRNA for HsLIM15, complete cds
							z832d09.s1 Soares retina N2b4HR Homo sapiens cDNA clone IMAGE:360712 3'
							Homo sapiens envelope protein RIC-6 (env) gene, complete cds



Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
480	13265	25901	1.72	2.0E-29	AF084898.1	NT	Homo sapiens envelope protein RIC-6 (env) gene, complete cds
1523	14270	26955	6.82	2.0E-29	A063604.1	EST_HUMAN	wf25d10.x1 NCL_CGAP_UH1 Homo sapiens cDNA clone IMAGE:2492563 3' similar to TR:O15546 O15546
1523	14270	26956	6.92	2.0E-29	A063604.1	EST_HUMAN	HERV-E ENVELOPE GLYCOPROTEIN ;
4246	16987	29610	1.63	2.0E-29	AL163268.2	NT	wf85d10.x1 NCL_CGAP_UH1 Homo sapiens cDNA clone IMAGE:2492563 3' similar to TR:O15546 O15546
5735	18527	31449	0.99	2.0E-29	A082459.1	EST_HUMAN	HERV-E ENVELOPE GLYCOPROTEIN ;
6087	18865	31830	1.48	2.0E-29	A0806418.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C048
7459	18865	31830	1.36	2.0E-29	A0806418.1	EST_HUMAN	oe71e04.x1 NCL_CGAP_GC2 Homo sapiens cDNA clone IMAGE:1610814 3' similar to contains L1.12 L1
7876	20571	33698	1.16	2.0E-29	BE867157.1	EST_HUMAN	repetitive element ;
8477	21169	34313	0.63	2.0E-29	10567821	NT	wf27g07.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2356880 3' similar to contains
8477	21169	34314	0.63	2.0E-29	10567821	NT	element MER6 repetitive element ;
9408	22070	35241	3.61	2.0E-29	AL163248.2	NT	601442208F-1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3846848 5'
9408	22070	35242	3.61	2.0E-29	AL163248.2	NT	Homo sapiens DNA-binding protein (LOC66242), mRNA
10139	22787	35999	3.61	2.0E-29	AL163248.2	NT	Homo sapiens DNA-binding protein (LOC66242), mRNA
10139	22787	36000	3.61	2.0E-29	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C048
10877	23557	36804	1.31	2.0E-29	BF025647.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C048
11459	24063		2.04	2.0E-29	11425108	NT	Homo sapiens chromosome 21 segment HS21C048
11499	24100		1.73	2.0E-29	AW880701.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C048
8691	21383	34527	7.37	1.0E-29	AW983980.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C048
10518	23164	36391	0.85	1.0E-29	X00658.1	NT	601686634F-1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3662833 6'
6487	19264	32255	2.97	9.0E-30	AA761215.1	EST_HUMAN	Homo sapiens splicing factor similar to dhaj (SPF31), mRNA
11992	24531		1.76	9.0E-30	11422745	NT	QV0-OT0032-080300-155-401 OT0032 Homo sapiens cDNA
6227	19001		6.94	8.0E-30	F08688.1	EST_HUMAN	RC1-HN0003-220300-021-504 HN0003 Homo sapiens cDNA
8168	20962	33904	3.72	8.0E-30	AA383873.1	EST_HUMAN	R. rattus RYA3 mRNA for a potential ligand-binding protein
8583	21275	34412	3.1	8.0E-30	AI557072.1	EST_HUMAN	nz20c07.s1 NCL_CGAP_GC81 Homo sapiens cDNA clone IMAGE:1288332 3' similar to contains MER4.b1
1605	14251		1.03	7.0E-30	BE091133.1	EST_HUMAN	MER4 repetitive element ;
1766	14508	27209	1.73	6.0E-30	D25303.1	NT	Homo sapiens zinc/ferron regulated transporter-like (ZIRT1), mRNA
3185	15948	28598	2.3	6.0E-30	BE008026.1	EST_HUMAN	HSC23F051 normalized infant brain cDNA Homo sapiens cDNA clone c-23f05
10437	23083	36310	0.48	6.0E-30	AF177271.1	NT	EST97317 Thymus 1 Homo sapiens cDNA 5' end similar to EST containing O family repeat
							PT2.1_13_B11.r.tumor2 Homo sapiens cDNA 3'
							PM4-BT0724-150400-004-411 BT0724 Homo sapiens cDNA
							Human mRNA for Integrin alpha subunit, complete cds
							QV0-BN0147-200400-214-412 BN0147 Homo sapiens cDNA
							Homo sapiens CTCL tumor antigen aa20-10 mRNA, partial cds

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12769	17897		3.38	6.0E-30	X61755.1	NT	Human lambda-immunoglobulin constant region complex (germline)
3994	16742	29376	26.19	5.0E-30	A1399992.1	EST_HUMAN	igb2g03.x1 NCI CGAP_CLL.1 Homo sapiens cDNA clone IMAGE:2116276 3' similar to contains Alu repetitive element
5159	25176		6.44	5.0E-30	U87931.1	NT	Human acornitase hydratase (ACO2) gene, exon 7
10802	23485		1.95	5.0E-30	AL163278.2	NT	Homo sapiens chromosome 21 segment HS21C078
11103	23773	37047	2.47	5.0E-30	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
11103	23773	37048	2.47	5.0E-30	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
2139	14869	27599	1.72	4.0E-30	AW937471.1	EST_HUMAN	QV3-DT0043-090200-080-c06 DT0043 Homo sapiens cDNA
2139	14869	27600	1.72	4.0E-30	AW937471.1	EST_HUMAN	QV3-DT0043-090200-080-c06 DT0043 Homo sapiens cDNA
6758	17925	30560	0.63	4.0E-30	P11369	SWISSPROT	RETROVIRUS-RELATED POL POLYPROTEIN [CONTAINS: REVERSE TRANSCRIPTASE ; ENDONUCLEASE]
8803	21495	34641	2.82	4.0E-30	AW812488.1	EST_HUMAN	GM1-ST0181-091199-035-108 ST0181 Homo sapiens cDNA
1129	13895		2.11	3.0E-30	A1398551.1	EST_HUMAN	qp93c05.x1 Soares fetal N52HF8 9w Homo sapiens cDNA clone IMAGE:1938020 3' similar to contains MER29.b2 MER29 repetitive element ;
3740	18493	29128	0.93	3.0E-30	AF128993.1	NT	Homo sapiens telomerase reverse transcriptase (TERT) gene, exons 1-6
7852	20547		0.58	3.0E-30	AF078779.1	NT	Rattus norvegicus putative four repeat bn channel mRNA, complete cds
8385	21078		0.48	3.0E-30	AF078779.1	NT	Rattus norvegicus putative four repeat bn channel mRNA, complete cds
10333	22980	36200	1.7	3.0E-30	BE350127.1	EST_HUMAN	h09g01.x1 NCI CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3146256 3' similar to contains MER29.b3 MER29 repetitive element ;
10465	23111	36342	0.53	3.0E-30	AB032969.1	NT	Homo sapiens mRNA for KIAA1143 protein, partial cds
10465	23111	36343	0.53	3.0E-30	AB032969.1	NT	Homo sapiens mRNA for KIAA1143 protein, partial cds
11168	23835	37116	2.48	3.0E-30	P34056	SWISSPROT	TRANSCRIPTION FACTOR AP-2
680	13438	26077	0.92	2.0E-30	AW857315.1	EST_HUMAN	CMO-CT0307-310100-159-H03 CT0307 Homo sapiens cDNA
1062	13820		3.11	2.0E-30	F08888.1	EST_HUMAN	HSC23F051 normalized infant brain cDNA Homo sapiens cDNA clone c-23f05
1462	14209	26896	5.31	2.0E-30	BE176877.1	EST_HUMAN	RC5-HT0582-110400-013-H08 HT0582 Homo sapiens cDNA
2720	15427	28165	8	2.0E-30	BE765232.1	EST_HUMAN	IL2-NT0101-280700-116-E04 NT0101 Homo sapiens cDNA
2820	15696	28331	6.39	2.0E-30	AF114156.1	NT	Homo sapiens Y-linked zinc finger protein (ZFY) gene, complete cds
3769	16521	29160	2.26	2.0E-30	AW206591.1	EST_HUMAN	UHF-B11-efo-o-12-o-UJ.st NCI CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2722558 3'
4727	17459	30095	1.51	2.0E-30	BE298945.1	EST_HUMAN	601119880F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3029438 5'
4727	17459	30096	1.51	2.0E-30	BE298945.1	EST_HUMAN	601119880F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3029438 5'
6660	19420	32435	0.55	2.0E-30	BF306337.1	EST_HUMAN	601893208F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4138963 5'
8375	21068	34208	0.45	2.0E-30	AA019103.1	EST_HUMAN	zs68c10.11 Soares retina N2b44HR Homo sapiens cDNA clone IMAGE:363188 5'
8435	21128	34265	4.66	2.0E-30	C18939.1	EST_HUMAN	C18939 Human placenta cDNA (TFujwara) Homo sapiens cDNA clone GEN-570C01 5'

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8533	21225	34368	3.61	2.0E-30	BE870617.1	EST_HUMAN	7e37c12.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3284662 3' similar to SW:DHSA_HUMAN P31040 SUCCINATE DEHYDROGENASE [UBIQUINONE] FLAVOPROTEIN SUBUNIT PRECURSOR;
8533	21225	34367	3.61	2.0E-30	BE870617.1	EST_HUMAN	7e37c12.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3284662 3' similar to SW:DHSA_HUMAN P31040 SUCCINATE DEHYDROGENASE [UBIQUINONE] FLAVOPROTEIN SUBUNIT PRECURSOR;
9897	22547	35741	3.62	2.0E-30	AW071688.1	EST_HUMAN	EST383657 MAGE resequences, MAGL Homo sapiens cDNA
9882	22630	35839	7.37	2.0E-30	AW470791.1	EST_HUMAN	ha33d06.x1 NCI_CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2875499 3' similar to contains THR.L33 THR repetitive element;
280	13087	25729	18.93	1.0E-30	C18939.1	EST_HUMAN	C18939 Human placenta cDNA (TFujwara) Homo sapiens cDNA clone GEN-570C01 5'
525	13309	25842	2.34	1.0E-30	AW468897.1	EST_HUMAN	ha30b04.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2910991 3' similar to contains MER1.13 MER1 MER1 repetitive element;
699	13474	26122	2.62	1.0E-30	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
2209	14637	27675	7.16	1.0E-30	AA684377.1	EST_HUMAN	ac77b08.s1 Stratagene lung (#637210) Homo sapiens cDNA clone IMAGE:868569 3'
2464	15182	27821	2.01	1.0E-30	BF347728.1	EST_HUMAN	602022560F1 NCI_CGAP_Bm87 Homo sapiens cDNA clone IMAGE:4157991 5'
3050	15816	28461	0.94	1.0E-30	AA315045.1	EST_HUMAN	EST186868 HCC cell line (metastasis to liver in mouse) II Homo sapiens cDNA 5' end
7624	20280	33399	2.46	1.0E-30	BF189290.1	EST_HUMAN	601809932F1 NIH_MGC_18 Homo sapiens cDNA clone IMAGE:4040804 5'
12591	25268		0.95	1.0E-30	H55593.1	EST_HUMAN	GHR220532 Chromosome 22 exon Homo sapiens cDNA clone C22_728 5'
3748	16501	29135	0.81	9.0E-31	T73025.1	EST_HUMAN	yc65e06.r1 Stratagene liver (#637224) Homo sapiens cDNA clone IMAGE:85570 5'
3748	16501	29136	0.81	9.0E-31	T73025.1	EST_HUMAN	yc65e06.r1 Stratagene liver (#637224) Homo sapiens cDNA clone IMAGE:85570 5'
8223	20917	34053	0.81	9.0E-31	R18214.1	EST_HUMAN	yc98b08.r1 Soares Infant brain 1N1B Homo sapiens cDNA clone IMAGE:30596 5' similar to gb:X12953 RAS-RELATED PROTEIN RAB-2 (HUMAN);
8223	20917	34054	0.81	9.0E-31	R18214.1	EST_HUMAN	yc98b08.r1 Soares Infant brain 1N1B Homo sapiens cDNA clone IMAGE:30596 5' similar to gb:X12953 RAS-RELATED PROTEIN RAB-2 (HUMAN);
8522	21214		1.83	9.0E-31	Z38283.1	EST_HUMAN	HSC05F032 normalized Infant brain cDNA Homo sapiens cDNA clone c-05f03 3'
8524	21216	34359	0.48	9.0E-31	AF078779.1	NT	Rattus norvegicus putative four repeat ion channel mRNA, complete cds
1054	19813	29473	2.41	8.0E-31		NT	Homo sapiens hypothetical protein FLJ20420 (FLJ20420), mRNA
2414	15135		4.6	8.0E-31	AL163208.2	NT	Homo sapiens chromosome 21 segment HS21C008
4881	17590	30213	1.43	8.0E-31	P23275	SWISSPROT	OLFACTORY RECEPTOR 15 (OR3)
4881	17590	30214	1.43	8.0E-31	P23275	SWISSPROT	OLFACTORY RECEPTOR 15 (OR3)
2674	15383	28123	3.29	7.0E-31	BE328517.1	EST_HUMAN	hw05a11.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3182012 3'
2674	15383	28124	3.29	7.0E-31	BE328517.1	EST_HUMAN	hw05a11.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3182012 3'
8300	20694	34130	0.96	7.0E-31	AF208541.1	NT	Homo sapiens V1-vascular vasopressin receptor AVPR1A gene, promoter region and partial cds
8300	20694	34131	0.96	7.0E-31	AF208541.1	NT	Homo sapiens V1-vascular vasopressin receptor AVPR1A gene, promoter region and partial cds

Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9168	21836		0.94	7.0E-31	BE408611.1	EST_HUMAN	601304125F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3638310 5'
12434	24805	31044	2.28	7.0E-31	X51755.1	NT	Human lamibda-immunoglobulin constant region complex (germline)
3667	16420		2.66	6.0E-31	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
8053	20747		4.37	6.0E-31	AF055006.1	NT	Homo sapiens MHC class 1 region
8229	20923	34062	0.86	6.0E-31	BE350127.1	EST_HUMAN	h09g01.x1 NCI_CGAP_Kd13 Homo sapiens cDNA clone IMAGE:3146258 3' similar to contains MER29.L3
12169	25195		1.96	6.0E-31	BE894488.1	EST_HUMAN	MER29 repetitive element;
187	13000	25640	3.58	5.0E-31	M60804.1	NT	601433087F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3918524 5'
187	13000	25641	3.58	5.0E-31	M60804.1	NT	Homo sapiens type I DNA topoisomerase gene, exon 8
8344	21037		0.73	5.0E-31	BF056540.1	EST_HUMAN	Homo sapiens type I DNA topoisomerase gene, exon 8
582	13362		6.18	4.0E-31	AJ271795.1	NT	7k0604.x1 NCI_CGAP_G08 Homo sapiens cDNA clone IMAGE:3443479 3' similar to TR:Q13537 Q13537 SIMILAR TO POGO ELEMENT; contains L1.1 L1 repetitive element;
							Homo sapiens Xq pseudautosomal region; segment 1/2
1606	14352	27040	0.91	4.0E-31	Q10473	SWISSPROT	POLYPEPTIDE N-ACETYL GALACTOSAMINYLTRANSFERASE (PROTEIN-UDP ACETYL GALACTOSAMINYLTRANSFERASE) (UDP-GALNAc:POLYPEPTIDE, N- ACETYL GALACTOSAMINYLTRANSFERASE) (GALNAc-T1)
1810	14550		1.57	4.0E-31	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
2792	15497		1.23	4.0E-31	5730038	NT	Homo sapiens SET domain and mariner transposase fusion gene (SETMAR) mRNA
12205	24672		1.86	4.0E-31	AJ230125.1	NT	Homo sapiens GGT1 gene, exon 1
12457	24826		1.86	4.0E-31	11430273	NT	Homo sapiens KIAA0569 gene product (KIAA0569), mRNA
7239	18824	32998	12.23	3.0E-31	4826853	NT	Homo sapiens NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 8 (16kD, ASH1) (NDUFB8) mRNA
7303	20072	33151	1.28	3.0E-31	11420328	NT	Homo sapiens hypothetical protein FLJ10842 (FLJ10842), mRNA
8091	20755		2	3.0E-31	AL163206.2	NT	Homo sapiens chromosome 21 segment HS21C006
9479	22132	35312	3.7	3.0E-31	D14523.1	NT	Horse mRNA for ferritin L-chain, complete cds
10498	23144	36371	0.54	3.0E-31	AA421242.1	EST_HUMAN	zu06404.f1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:731047 5'
10527	23224	36459	2.04	3.0E-31	P11174	SWISSPROT	40S RIBOSOMAL PROTEIN S15 (RIG PROTEIN)
11101	23771		3.65	3.0E-31	BF035327.1	EST_HUMAN	601458531F1 NIH_MGC_86 Homo sapiens cDNA clone IMAGE:3862086 5'
12819	25056		1.66	3.0E-31	AB037763.1	NT	Homo sapiens mRNA for KIAA1342 protein, partial cds
1910	14847	27358	1.37	2.0E-31	AW838171.1	EST_HUMAN	QV2-LT0051-280300-111-03 LT0051 Homo sapiens cDNA
2211	14639	27877	1.09	2.0E-31	A393388.1	EST_HUMAN	tg4405.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2111672 3'
2339	15052	27800	1.89	2.0E-31	AL116245.1	EST_HUMAN	DKFZp781G1513.f1 761 (synonym: hamy2) Homo sapiens cDNA clone DKFZp781G1513 5'
2442	15161	27898	4.01	2.0E-31	AA458624.1	EST_HUMAN	sa88f11.s1 Strategene fetal retina 937202 Homo sapiens cDNA clone IMAGE:838413 3' similar to contains THR.12 THR repetitive element;

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5193	18001	30624	0.81	2.0E-31	AW444496.1	EST_HUMAN	U1-H-B13-ekb-f-09-0-J1.s1 NCI_CGAP_Sub5 Homo sapiens cDNA clone IMAGE:2733833 3'
5624	18421	31334	3.57	2.0E-31	BE350127.1	EST_HUMAN	h09g01.x1 NCI_CGAP_Kd13 Homo sapiens cDNA clone IMAGE:3148256 3' similar to contains MER28.B3 MER28 repetitive element.
8975	21665		2.05	2.0E-31	AA877764.1	EST_HUMAN	nr0804.s1 NCI_CGAP_Cot10 Homo sapiens cDNA clone IMAGE:1161055 3' similar to TR:Q13537 Q13537 MER37 TRANSPORTABLE ELEMENT, COMPLETE CONSENSUS SEQUENCE. ;
9107	21785	34959	3.84	2.0E-31	7681535	NT	Homo sapiens B9 protein (B9), mRNA
9806	22457	35681	0.84	2.0E-31	AV710948.1	EST_HUMAN	AV710948 Cu Homo sapiens cDNA clone CuAALB07 5'
9806	22457	35682	0.94	2.0E-31	AV710948.1	EST_HUMAN	AV710948 Cu Homo sapiens cDNA clone CuAALB07 5'
9975	22623	35828	2.35	2.0E-31	BE408811.1	EST_HUMAN	601304125F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3638310 5'
9975	22623	35830	2.35	2.0E-31	BE408811.1	EST_HUMAN	601304125F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3638310 5'
12144	24632		1.58	2.0E-31	AF148512.1	NT	Homo sapiens hexokinase II gene, promoter region
12279	25413		1.75	2.0E-31	A114527.1	EST_HUMAN	HA1110 Human fetal liver cDNA library Homo sapiens cDNA
15	12842	25456	11.09	1.0E-31	U93163.1	NT	Homo sapiens IMAGE-B2 (MAGE-B2), MAGE-B3 (MAGE-B3), MAGE-B4 (MAGE-B4), and MAGE-B1 (MAGE-B1) genes, complete cds
1658	14404	27082	1.35	1.0E-31	O96371	SWISSPROT	OLFACTORY RECEPTOR 2C1
1658	14404	27083	1.35	1.0E-31	O96371	SWISSPROT	OLFACTORY RECEPTOR 2C1
1658	14404	27084	1.35	1.0E-31	O96371	SWISSPROT	OLFACTORY RECEPTOR 2C1
4592	17327	29932	1.15	1.0E-31	AL134378.1	EST_HUMAN	DKFZp547B235_r1 547 (synonym: hfbt1) Homo sapiens cDNA clone DKFZp547B235 5'
4592	17327	29933	1.15	1.0E-31	AL134378.1	EST_HUMAN	DKFZp547B235_r1 547 (synonym: hfbt1) Homo sapiens cDNA clone DKFZp547B235 5'
5210	18018	30840	3.79	1.0E-31	AW391678.1	EST_HUMAN	MR3-S10220-151299-028-e08_1 ST0220 Homo sapiens cDNA
6042	18822	31782	2.2	1.0E-31	AF048727.1	NT	Homo sapiens minisatellite cab1 repeat region
7189	19876	32948	1	1.0E-31	AF126145.1	NT	Bos taurus xenobiotic/medium-chain fatty acid:CoA ligase form XL-III mRNA, nuclear mRNA encoding mitochondrial protein, complete cds
10136	22784	35965	0.51	1.0E-31	U93163.1	NT	Homo sapiens IMAGE-B2 (MAGE-B2), MAGE-B3 (MAGE-B3), MAGE-B4 (MAGE-B4), and MAGE-B1 (MAGE-B1) genes, complete cds
10833	23515	36757	2.7	1.0E-31	A109434.1	EST_HUMAN	q12103.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:1750709 3' similar to TR:Q16595 Q16595 FRATAXIN.
11830	24414	37752	1.48	1.0E-31	U96061.1	NT	Human germ-line T-cell receptor beta chain TCRBV17S1A1T, TCRBV231, TCRBV10S1P, TCRBV28S1P, TCRBV18S1P, TCRBV15S1, TCRBV11S1A1T, HVB rebs, TCRBV28S1P, TCRBV34S1, TCRBV14S1, TCRBV3S1, TCRBV4S1A1T, TRY4, TRY5, TRY6, TRY7, TRY8, TCRBD1, TCRBU1S1, TCRBU1S2,>
6542	19307	32312	2.38	9.0E-32	AV723976.1	EST_HUMAN	AV723976 HTB Homo sapiens cDNA clone HTBAAG01 5'
7492	20164		0.66	9.0E-32	11430822	NT	Homo sapiens hypothetical protein FLJ11294 (FLJ11294), mRNA
2070	14802	27530	2.48	8.0E-32	A1036770.1	EST_HUMAN	oz15a09.x1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:1875384 3'

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6394	18194	30887	0.97	8.0E-32	AW997214.1	EST_HUMAN	RC2-BN0048-200300-016-a04 BN0048 Homo sapiens cDNA
4807	17538	30181	0.98	7.0E-32	P52591	SWISSPROT	NUCLEAR ENVELOPE PORE MEMBRANE PROTEIN POM 121 (PORE MEMBRANE PROTEIN OF 121 KD) (P145)
12122	24614		8.19	7.0E-32	X17283.1	NT	Human chromosome 22 Immunoglobulin V(k) gene, part with 5' breakpoint between orphan and neighbouring non-empirical region
2735	15442	28180	1.01	6.0E-32	A478104.1	EST_HUMAN	Im34a10.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2159894 3' similar to contains MER28.13
7286	19950		1.47	6.0E-32	BE989016.1	EST_HUMAN	MER29 repetitive element;
1011	13771	28431	16.78	5.0E-32	AF116927.1	NT	601151630F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3913087 5'
910	13677		1.78	4.0E-32	AL163248.2	NT	Homo sapiens PRO1181 mRNA, complete cds
5148	17867		0.91	4.0E-32	A1885593.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C048
7503	20174	33266	2.94	4.0E-32	11432574	NT	ws08h12.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2498647 3' similar to contains MER18.b3
7503	20174	33267	2.94	4.0E-32	11432574	NT	MER18 repetitive element;
8257	20851		1.2	4.0E-32	BE064410.1	EST_HUMAN	Homo sapiens AT-binding transcription factor 1 (ATBF1), mRNA
443	13229	25872	3.7	3.0E-32	Y17283.1	NT	Homo sapiens AT-binding transcription factor 1 (ATBF1), mRNA
1437	14184	28870	8.08	3.0E-32	AV731500.1	EST_HUMAN	RC4-BT0311-141188-011-H08 BT0311 Homo sapiens cDNA
9294	21961	35135	8.38	3.0E-32	AV759634.1	EST_HUMAN	Homo sapiens FLI-1 gene, partial
9294	21961	35136	8.38	3.0E-32	AV759634.1	EST_HUMAN	AV731500 HTF Homo sapiens cDNA clone HTFAKC07 5'
10643	23525	36768	3.57	3.0E-32	AA777621.1	EST_HUMAN	AV759634 BM Homo sapiens cDNA clone BMFBBH12 5'
12146	24634		3.51	3.0E-32	BE279086.1	EST_HUMAN	AV759634 BM Homo sapiens cDNA clone BMFBBH12 5'
12507	17899	30598	2.97	3.0E-32	6174574	NT	z65a07.s1 Soares fetal liver spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:448500 3' similar to contains THR.13 THR repetitive element;
12507	17899	30597	2.97	3.0E-32	6174574	NT	601156285F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3139701 5'
12507	17899	30597	2.97	3.0E-32	6174574	NT	Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (trithorax (Drosophila) homolog); translocated to, 4 (MLLT4) mRNA
12566	24056		2.27	3.0E-32	BE279086.1	EST_HUMAN	Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (trithorax (Drosophila) homolog); translocated to, 4 (MLLT4) mRNA
6158	18936	31902	0.81	2.0E-32	M35416.1	NT	601156285F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3139701 5'
6387	19156	32153	5.32	2.0E-32	Z38133.1	NT	Human cell 12-lipoxygenase mRNA, complete cds
6387	19156	32156	5.32	2.0E-32	Z38133.1	NT	H. sapiens mRNA for myosin
8176	20870	34003	2.26	2.0E-32	AA114294.1	EST_HUMAN	H. sapiens mRNA for myosin
8176	20870	34004	2.26	2.0E-32	AA114294.1	EST_HUMAN	z66c08.r1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone IMAGE:563150 5'
11859	24443	37784	2.98	2.0E-32	T18962.1	EST_HUMAN	z66c08.r1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone IMAGE:563150 5'
12763	25022	30861	2.42	2.0E-32	AV736449.1	EST_HUMAN	b12058 Testis 1 Homo sapiens cDNA clone b12056
							AV736449 CB Homo sapiens cDNA clone CBFBIA08 5'

Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12763	25022	30862	2.42	2.0E-32	AV736449.1	EST_HUMAN	AV736449 GB Homo sapiens cDNA clone GBF8IA08 5'
3090	15856		1.67	1.0E-32	BE743289.1	EST_HUMAN	601573207F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3834433 5'
8655	19437	32453	7.02	1.0E-32	11439780	NT	Homo sapiens chromosome 11 open reading frame 9 (C11ORF9), mRNA
8494	21186	34329	8.08	1.0E-32	AA720574.1	EST_HUMAN	hw21g02.s1 NCI_CGAP_GCB0 Homo sapiens cDNA clone IMAGE:1241138 3' similar to contains THR13 THR repetitive element;
3474	16230		4.58	9.0E-33	BE327112.1	EST_HUMAN	hw07c05.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3182216 3' similar to TR:O88539 O88539 WW DOMAIN BINDING PROTEIN 11;
6326	19066		4.05	9.0E-33	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
8687	21379	34523	1.95	9.0E-33	BF347228.1	EST_HUMAN	602021164F1 NCI_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4156670 5'
10701	23392		5.22	9.0E-33	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
58	12887	25517	3.14	7.0E-33	5031736	NT	Homo sapiens short-chain alcohol dehydrogenase family member (HEP27) mRNA
68	12887	25518	3.14	7.0E-33	5031736	NT	Homo sapiens short-chain alcohol dehydrogenase family member (HEP27) mRNA
2158	14888	27622	2.29	7.0E-33	AI590115.1	EST_HUMAN	hw12b09.x1 NCI_CGAP_U2 Homo sapiens cDNA clone IMAGE:2178809 3' similar to contains OFR11 OFR repetitive element;
2655	16365		6.45	7.0E-33	AV730056.1	EST_HUMAN	AV730056 HTF Homo sapiens cDNA clone HTFAVE06 5'
3236	16998		9.3	7.0E-33	AW971307.1	EST_HUMAN	EST383396 MAGI resequences, MAGL Homo sapiens cDNA
8845	21537		1.56	7.0E-33	X54890.1	NT	Human hLRP mRNA for leukocyte common antigen-related peptide (protein-tyrosine phosphate) (EC 3.1.3.48)
10732	23419	36860	2.41	7.0E-33	BF347228.1	EST_HUMAN	602021164F1 NCI_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4156670 5'
11213	23878	37182	1.93	7.0E-33	AW971668.1	EST_HUMAN	EST383396 MAGI resequences, MAGL Homo sapiens cDNA
12127	24619	31090	4.34	7.0E-33	AA601416.1	EST_HUMAN	hw16h01.s1 NCI_CGAP_Phe1 Homo sapiens cDNA clone IMAGE:1100881 3' similar to contains L1.H1 L1 repetitive element;
3720	18473		0.94	6.0E-33	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
5976	18758	31720	0.96	6.0E-33	F30631.1	EST_HUMAN	HSPD21201 HM3 Homo sapiens cDNA clone s4000107H08
5976	18758	31721	0.96	6.0E-33	F30631.1	EST_HUMAN	HSPD21201 HM3 Homo sapiens cDNA clone s4000107H08
8478	21170	34315	9.33	6.0E-33	JO4038.1	NT	Human glyceraldehyde-3-phosphate dehydrogenase (GAPDH) gene, complete cds
8803	21295	34438	3.09	6.0E-33	11426198	NT	Homo sapiens similar to RAD23 (S. cerevisiae) homolog B (H. sapiens) (LOC53277), mRNA
9910	22559	35754	1.12	6.0E-33	6755609	NT	Mus musculus SRY-box containing gene 6 (Srb6), mRNA
9910	22559	35755	1.12	6.0E-33	6755609	NT	Mus musculus SRY-box containing gene 6 (Srb6), mRNA
1770	14512		1.46	5.0E-33	BF373515.1	EST_HUMAN	QV1-F10168-100700-271-402 F10169 Homo sapiens cDNA
1874	14612		1.19	5.0E-33	11141894	NT	Homo sapiens solute carrier family 5 (choline transporter), member 7 (SLC6A7), mRNA
1891	14628	27337	1.43	5.0E-33	4507208	NT	Homo sapiens spermidine synthase (SRM) mRNA
1891	14628	27338	1.43	5.0E-33	4507208	NT	Homo sapiens spermidine synthase (SRM) mRNA

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2270	14936		1.29	5.0E-33	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
10148	22798	36010	0.8	5.0E-33	AW264679.1	EST_HUMAN	xq33f11.x1 NCI CGAP_Lu28 Homo sapiens cDNA clone IMAGE:2752461 3'
10148	22798	36011	0.8	5.0E-33	AW264679.1	EST_HUMAN	xq33f11.x1 NCI CGAP_Lu28 Homo sapiens cDNA clone IMAGE:2752461 3'
1106	13963		2.16	4.0E-33	AL163207.2	NT	Homo sapiens chromosome 21 segment HS21C007
2121	14952	27581	1.64	4.0E-33	4739987	NT	Homo sapiens RAB1, member RAS oncogene family (RAB1) mRNA
2419	15140		2.02	4.0E-33	AA626621.1	EST_HUMAN	ab51b71.1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone IMAGE:844317 5' similar to contains Alu repetitive element; contains MER28.b2 MER28 repetitive element ;
2547	15262	27999	4.15	4.0E-33	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
4450	17188	29811	2.15	4.0E-33	AW263349.1	EST_HUMAN	UHH-B12-ab1-c-03-Q-J1.s1 NCI CGAP_Sub4 Homo sapiens cDNA clone IMAGE:2727149 3'
5318	18122	30779	24.73	4.0E-33	AA053053.1	EST_HUMAN	z71a08.r1 Stratagene colon (9837204) Homo sapiens cDNA clone IMAGE:510038 5' similar to gb:X12871_mai HETEROGENEOUS NUCLEAR RIBONUCLEOPROTEIN A1 (HUMAN);
6290	19072	32057	0.87	4.0E-33	8393904	NT	Homo sapiens polymerase (DNA directed), alpha (POLA), mRNA
6290	19072	32058	0.87	4.0E-33	8393994	NT	Homo sapiens polymerase (DNA directed), alpha (POLA), mRNA
1067	13825		5.5	3.0E-33	BE350127.1	EST_HUMAN	h09g01.x1 NCI CGAP_Kd13 Homo sapiens cDNA clone IMAGE:3149256 3' similar to contains MER28.b3 MER28 repetitive element ;
1068	13825		3.89	3.0E-33	BE350127.1	EST_HUMAN	h09g01.x1 NCI CGAP_Kd13 Homo sapiens cDNA clone IMAGE:3149256 3' similar to contains MER28.b3 MER28 repetitive element ;
2451	15595		0.92	3.0E-33	AV647851.1	EST_HUMAN	AV647851 GLC Homo sapiens cDNA clone GLOBGCF09 3'
10338	22985	36203	1.04	3.0E-33	AA881510.1	EST_HUMAN	ak32b12.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1407847 3' similar to TRQ13579 Q13679 MARINER TRANSPOSASE ;
102	12843		3.21	2.0E-33	A1160189.1	EST_HUMAN	qb67g03.x1 Soares_fetal_heart_NbHH19W Homo sapiens cDNA clone IMAGE:1705204 3' similar to contains OFR.11 OFR repetitive element ;
4386	17122		5.39	2.0E-33	BE169036.1	EST_HUMAN	MR0-HT0405-160300-202-308 HT0405 Homo sapiens cDNA
4926	17653	30285	28.91	2.0E-33	AA626683.1	EST_HUMAN	ab51g11.1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone IMAGE:844388 5' similar to gb:X00734_cds1 TUBULIN BETA-5 CHAIN (HUMAN);
5033	17753	30365	2.75	2.0E-33	11421332	NT	Homo sapiens hypothetical protein SIRP-b2 (SIRP-b2), mRNA
5033	17753	30366	2.75	2.0E-33	11421332	NT	Homo sapiens hypothetical protein SIRP-b2 (SIRP-b2), mRNA
6329	16099	32087	1.81	2.0E-33	A1277492.1	EST_HUMAN	qb6d01.x1 Soares_NhHMPu_S1 Homo sapiens cDNA clone IMAGE:1880161 3'
8998	21688		2.18	2.0E-33	A1052256.1	EST_HUMAN	cc21d03.x1 Soares_fetal_liver_spleen_INFLS_S1 Homo sapiens cDNA clone IMAGE:1675073 3' similar to gb:M28636 TRANSLATIONAL INITIATION FACTOR 2 BETA SUBUNIT (HUMAN);
10513	23159	36384	1.48	2.0E-33	11421332	NT	Homo sapiens hypothetical protein SIRP-b2 (SIRP-b2), mRNA
10513	23159	36385	1.48	2.0E-33	11421332	NT	Homo sapiens hypothetical protein SIRP-b2 (SIRP-b2), mRNA
11046	23716	36985	1.26	2.0E-33	AA453647.1	EST_HUMAN	zx48f05.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:795489 3' similar to TR:G1263081 G1263081 MARINER TRANSPOSASE ;



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Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8	12835		1.18	1.0E-33	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
5156	17873	30485	2.48	1.0E-33	4502558	NT	Homo sapiens calcitriol/calmodulin-dependent protein kinase IV (CAMK4) mRNA
5501	18289	31198	0.68	1.0E-33	AF199420.1	NT	Homo sapiens F-box protein FBL4 (FBL4) mRNA, complete cds
7307	19990	33087	1.04	1.0E-33	M13975.1	NT	Homo sapiens protein kinase C beta-II type (PRKCB1) mRNA, complete cds
9820	25432		0.84	1.0E-33	U60822.1	NT	Human dystrophin (DMD) gene, exons 7, 8 and 9, and partial cds
11282	23953	37251	1.83	1.0E-33	AW998818.1	EST_HUMAN	QV3-BN0047-230200-102-b03 BN0047 Homo sapiens cDNA
11663	24259	37581	3.32	1.0E-33	U60822.1	NT	Human dystrophin (DMD) gene, exons 7, 8 and 9, and partial cds
12407	24780		2.21	1.0E-33	A1827191.1	EST_HUMAN	wc88c06.x1 NCJ_CGAP_Kid111 Homo sapiens cDNA clone IMAGE:2462410 3'
12570	12835		4.07	1.0E-33	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
12602	24914	31005	1.41	1.0E-33	AV727809.1	EST_HUMAN	AV727809 HTC Homo sapiens cDNA clone HTCCNC12 5'
12780	25034		1.81	9.0E-34	AJ271736.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
2168	14897	27631	0.98	8.0E-34	8822751	NT	Homo sapiens hypothetical protein FLJ10900 (FLJ10900), mRNA
7689	20353	33488	0.96	8.0E-34	BE069882.1	EST_HUMAN	MR4-BT0399-200100-001-h03 BT0399 Homo sapiens cDNA
1426	14173	28888	2.27	7.0E-34	T70845.1	EST_HUMAN	yd15605.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:108320 5'
6900	14173	28888	0.58	7.0E-34	T70845.1	EST_HUMAN	yd15605.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:108320 5'
12191	24682		3.05	7.0E-34	H12886.1	EST_HUMAN	y14c10.r1 Soares placenta Nb24P Homo sapiens cDNA clone IMAGE:148722 5'
488	13243	25884	2.3	6.0E-34	U10891.1	NT	Human G2 protein mRNA, partial cds
488	13243	25885	2.3	6.0E-34	U10891.1	NT	Human G2 protein mRNA, partial cds
12011	24544	31107	2.13	6.0E-34	U03686.1	NT	Mus musculus DAB/2J hair-specific (hac1-1) gene
1873	14611		2.9	5.0E-34	7706500	NT	Homo sapiens Npw38-binding protein Npw38P (LOC51729), mRNA
5002	17725	30328	3.61	5.0E-34	U30883.1	NT	Human splicing factor SRP55-1 (SRP55) mRNA, complete cds
8765	21457	34807	1.37	5.0E-34	AF078779.1	NT	Rattus norvegicus putative four repeat ion channel mRNA, complete cds
10550	23246	36482	2.24	5.0E-34	AB037858.1	NT	Homo sapiens mRNA for KIAA1435 protein, partial cds
11219	23882		1.78	5.0E-34	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C008
1981	14727	27449	1.84	4.0E-34	A1804687.1	EST_HUMAN	t84c08.x1 NCJ_CGAP_Pr28 Homo sapiens cDNA clone IMAGE:2249194 3'
5770	18561	31488	0.64	4.0E-34	A4881773.1	EST_HUMAN	ak35c01.s1 Soares testis NHT Homo sapiens cDNA clone IMAGE:1407938 3'
8838	21627	34760	1.28	4.0E-34	BF209778.1	EST_HUMAN	601874950F1 NIH_MGC_54 Homo sapiens cDNA clone IMAGE:4102213 5'
6138	18916	31886	0.78	3.0E-34	M37277.1	NT	Human Ig gamma H-chain D-region genes, partial cds
11100	23770		3.14	3.0E-34	BF035327.1	EST_HUMAN	601459531F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3962086 5'
8850	21541	34887	1.16	2.0E-34	A1878101.1	EST_HUMAN	wd35g08.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2330170 3' similar to contains MER29.12 MER29 repetitive element;

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8850	21541	34688	1.18	2.0E-34	AI678101.1	EST_HUMAN	w35g06.x1 Scores_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2330170 3' similar to contains MER29.12 MER28 repetitive element :
11113	23783	37057	1.34	2.0E-34	P51805	SWISSPROT	PLEXIN 4 PRECURSOR (TRANSMEMBRANE PROTEIN SEX)
11113	23783	37058	1.34	2.0E-34	P51805	SWISSPROT	PLEXIN 4 PRECURSOR (TRANSMEMBRANE PROTEIN SEX)
1494	14241	28828	6.53	1.0E-34	P12236	SWISSPROT	ADP-ATP CARRIER PROTEIN, LIVER ISOFORM T2 (ADP/ATP TRANSLOCASE 3) (ADENINE NUCLEOTIDE TRANSLOCATOR 3) (ANT 3)
3863	16418	29055	1.32	1.0E-34	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
4051	16786	29425	0.97	1.0E-34	AY006397.1	NT	Homo sapiens WNT3 precursor (WNT3) mRNA, complete cds
4051	16786	29426	0.97	1.0E-34	AY006397.1	NT	Homo sapiens WNT3 precursor (WNT3) mRNA, complete cds
4446	17182	31788	3.44	1.0E-34	BE071414.1	EST_HUMAN	RC2-BT0506-240400-016-h08 BT0506 Homo sapiens cDNA
6047	18827	31788	2.05	1.0E-34	BE074052.1	EST_HUMAN	601484430F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3886999 5'
6047	18827	31789	2.05	1.0E-34	BE074052.1	EST_HUMAN	601484430F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3886999 5'
9225	21904	36076	0.46	1.0E-34	P29286	SWISSPROT	OLFACTORY RECEPTOR-LIKE PROTEIN F5
9508	22249	35434	7.1	1.0E-34	AL036635.1	EST_HUMAN	DKFZp564A1563 J1 584 (synonym: hfr2) Homo sapiens cDNA clone DKFZp564A1563 5'
11138	23805	37083	1.39	1.0E-34	BE781790.1	EST_HUMAN	601470592F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3873478 5'
11138	23805	37084	1.39	1.0E-34	BE781790.1	EST_HUMAN	601470592F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3873478 5'
11153	23820	37100	1.82	1.0E-34	11439599	NT	Homo sapiens nucleobindin 2 (NUCB2), mRNA
12372	25350		1.65	1.0E-34	AA807097.1	EST_HUMAN	cc31c11.s1 NCI_CGAP_G081 Homo sapiens cDNA clone IMAGE:1351316 3' similar to gb:U68203
12593	24949		4.22	1.0E-34	AL163210.2	NT	TYROSINE-PROTEIN KINASE RECEPTOR FL14 PRECURSOR (HUMAN); Homo sapiens citronosome 21 segment HS21C010
3638	16389	29029	1.2	9.0E-35	AW663302.1	EST_HUMAN	hh77b06.y1 NCI_CGAP_G01 Homo sapiens cDNA clone IMAGE:2968787 5'
218	13029		7.71	8.0E-35	6031190	NT	Homo sapiens prohibitin (PHB) mRNA
1730	14472	27171	3.43	8.0E-35	BF589937.1	EST_HUMAN	nas33a08.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3258134 3' similar to TR:O75912
1730	14472	27172	3.43	8.0E-35	BF589937.1	EST_HUMAN	O75912 DIACYLGLYCEROL KINASE IOTA. ; nas33a08.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3258134 3' similar to TR:O75912
4814	17545	30170	2.69	8.0E-35	BF183195.1	EST_HUMAN	601809588F1 NIH_MGC_18 Homo sapiens cDNA clone IMAGE:4040324 5'
10589	23283	36522	2.42	8.0E-35	BE378480.1	EST_HUMAN	601236468F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3608513 5'
12119	24611		3.95	8.0E-35	BF509262.1	EST_HUMAN	602184624T1 NIH_MGC_42 Homo sapiens cDNA clone IMAGE:4300660 3'
6363	19162	32163	2.06	7.0E-35	11425417	NT	Homo sapiens phosphatidylinositol glycan, class L (PIGL), mRNA
1391	14138	28815	1.83	6.0E-35	AA767115.1	EST_HUMAN	af53h03.s1 Scores_hsd1s_NHT Homo sapiens cDNA clone 1309397 3'
1890	14996	27409	2.09	6.0E-35	6005975	NT	Homo sapiens zinc finger protein 208 (ZNF208), mRNA
4030	16775	29406	0.84	6.0E-35	AW287191.1	EST_HUMAN	UH-HBW0-ajd-d-09-0-UJ.s1 NCI_CGAP_Sub0 Homo sapiens cDNA clone IMAGE:2731433 3'

Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7798	20483	33615	3.84	6.0E-35	6005921	NT	Homo sapiens triple functional domain (PTPRF interacting) (TRIO), mRNA
8610	21302	34445	0.93	6.0E-35	X94232.1	NT	H. sapiens mRNA for novel T-cell activation protein
8610	21302	34446	0.93	6.0E-35	X94232.1	NT	H. sapiens mRNA for novel T-cell activation protein
9565	22218	35403	0.86	6.0E-35	AB002364.1	NT	Human mRNA for KIAA0388 gene, partial cds
9803	22454	35656	3.17	6.0E-35	AB037786.1	NT	Homo sapiens mRNA for KIAA1305 protein, partial cds
1704	14447	27146	1.36	5.0E-35	X63392.1	NT	H. sapiens immunoglobulin kappa light chain variable region L14
2787	15492	28232	1.07	5.0E-35	AB007866.2	NT	Homo sapiens mRNA for KIAA0408 protein, partial cds
3008	15775	28424	1.7	5.0E-35	6912639	NT	Homo sapiens Ring1 and YY1 binding protein (RYBP), mRNA
4378	17113	29746	1.7	5.0E-35	AF023288.1	NT	Homo sapiens cdk2 kinase (CLK2), propin1, coter1, glucocorticoidase (GBA), and metadase genes, complete cds; metadase pseudogene and glucocorticoidase pseudogene; and thrombospondin3 (THBS3) gene, partial cds
8084	20778		3.99	5.0E-35	BE890992.1	EST_HUMAN	601431984F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3917229 5'
8109	20803	33936	2.35	5.0E-35	A1208765.1	EST_HUMAN	qg38cd05.x1 Soares testis NIH Homo sapiens cDNA clone IMAGE:1837448 3' similar to SW:Y249_HUMAN Q92539 HYPOTHETICAL PROTEIN KIAA0249.;
8109	20803	33937	2.35	5.0E-35	A1208765.1	EST_HUMAN	qg38cd05.x1 Soares testis NIH Homo sapiens cDNA clone IMAGE:1837448 3' similar to SW:Y249_HUMAN Q92539 HYPOTHETICAL PROTEIN KIAA0249.;
11130	23798		2.46	5.0E-35	AA001786.1	EST_HUMAN	zh94f12.f1 Soares fetal liver spleen INFLS S1 Homo sapiens cDNA clone IMAGE:428016 5'
1413	14161	26845	16.86	4.0E-35	BE257007.1	EST_HUMAN	601109710F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3350405 5'
1811	14551	27265	4.87	4.0E-35	H91193.1	EST_HUMAN	yu08a07.f1 Soares fetal liver spleen INFLS Homo sapiens cDNA clone IMAGE:241236 5' similar to contains PTR5 repetitive element;
4753	17485		0.72	4.0E-35	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
7108	19796		1.81	4.0E-35	BE350127.1	EST_HUMAN	h009g01.x1 NCI_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3146256 3' similar to contains MER29.b3 MER29 repetitive element;
8416	21109	34248	8.88	4.0E-35	ALD46598.1	EST_HUMAN	DKFZp434L148.f1 434 (synonym: hbes3) Homo sapiens cDNA clone DKFZp434L148 5'
11729	24322	37646	1.38	4.0E-35	AW303317.1	EST_HUMAN	xv1703.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2813405 3' similar to contains Alu repetitive element; contains MER19.12 MER19 repetitive element;
1573	14320	27006	7.78	3.0E-35	BE268182.1	EST_HUMAN	601125260F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3345063 5'
2330	15035		1.5	3.0E-35	AF224492.1	NT	Homo sapiens phospholipid scramblase 1 gene, complete cds
5268	18092	30690	31.47	3.0E-35	BF433100.1	EST_HUMAN	7n25a09.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3565361 3' similar to TR:Q9QZH7 Q9QZH7 F-BOX PROTEIN FBL2.;
5256	18092	30691	31.47	3.0E-35	BF433100.1	EST_HUMAN	7n25a09.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3565361 3' similar to TR:Q9QZH7 Q9QZH7 F-BOX PROTEIN FBL2.;

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9388	22060		1.42	3.0E-35	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
10074	22722	35939	1.12	3.0E-35	AW003083.1	EST_HUMAN	wf03a05.x1 NCI_CGAP_G08 Homo sapiens cDNA clone IMAGE:2480432 3' similar to SW:POL1_HUMAN P10288 RETROVIRUS-RELATED POL POLYPROTEIN [CONTAINS: REVERSE TRANSCRIPTASE ; K0632F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA clone K0632 5' similar to REPETITIVE ELEMENT
108	15535	25567	1.88	2.0E-35	N88985.1	EST_HUMAN	A971F Heart Homo sapiens cDNA clone A971
1165	13919	28582	1.55	2.0E-35	T11909.1	EST_HUMAN	Homo sapiens mRNA for Gab2, complete cds
2215	14943	27683	5.79	2.0E-35	AB018413.1	NT	Homo sapiens Grb2-associated binder 2 (KIAA0571), mRNA
3306	16066	28714	1.12	2.0E-35	6912459	NT	Homo sapiens Grb2-associated binder 2 (KIAA0571), mRNA
3308	16068	28715	1.12	2.0E-35	6912459	NT	Homo sapiens mRNA for KIAA0895 protein, partial cds
3545	16300		0.94	2.0E-35	AB020702.1	NT	TCBAP2E4328 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP4328
3860	16640	28279	0.78	2.0E-35	BE247575.1	EST_HUMAN	TCBAP2E4328 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP4328
3860	16640	28280	0.78	2.0E-35	BE247575.1	EST_HUMAN	TCBAP2E4328 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP4328
4621	17356		2.57	2.0E-35	H49239.1	EST_HUMAN	yq19a12.1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:274079 5'
5465	18294	31192	2.7	2.0E-35	BF332417.1	EST_HUMAN	QV0-BT0701-210400-189-504 BT0701 Homo sapiens cDNA
7004	18698	32749	0.95	2.0E-35	BE832636.1	EST_HUMAN	CM2-MT0125-280700-267-G02 MT0125 Homo sapiens cDNA
7004	18698	32750	0.95	2.0E-35	BE832636.1	EST_HUMAN	CM2-MT0125-280700-267-G02 MT0125 Homo sapiens cDNA
7775	20471	33593	0.45	2.0E-35	AV723718.1	EST_HUMAN	AV723718 HTB Homo sapiens cDNA clone HTBAYA10 5'
7775	20471	33594	0.45	2.0E-35	AV723718.1	EST_HUMAN	AV723718 HTB Homo sapiens cDNA clone HTBAYA10 5'
10697	23388	36626	2.24	2.0E-35	X59417.1	NT	H. sapiens PROS-27 mRNA
11817	18294	31192	1.28	2.0E-35	BF332417.1	EST_HUMAN	QV0-BT0701-210400-189-504 BT0701 Homo sapiens cDNA
11899	16066	28714	1.72	2.0E-35	6912459	NT	Homo sapiens Grb2-associated binder 2 (KIAA0571), mRNA
11899	16066	28715	1.72	2.0E-35	6912459	NT	Homo sapiens Grb2-associated binder 2 (KIAA0571), mRNA
12062	24577	31120	1.36	2.0E-35	BE904978.1	EST_HUMAN	601496774F1 NIH_MGC 70 Homo sapiens cDNA clone IMAGE:3898699 5'
12062	24577	31121	1.36	2.0E-35	BE904978.1	EST_HUMAN	601496774F1 NIH_MGC 70 Homo sapiens cDNA clone IMAGE:3898699 5'
12572	24900		5.96	2.0E-35	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
12686	15535	25567	1.96	2.0E-35	N88985.1	EST_HUMAN	K0632F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA clone K0632 5' similar to REPETITIVE ELEMENT
45	12874	25498	6.81	1.0E-35	AA631949.1	EST_HUMAN	frnfc16 Regional genomic DNA specific cDNA library Homo sapiens cDNA clone CR12-1
45	12874	25497	6.81	1.0E-35	AA631949.1	EST_HUMAN	frnfc16 Regional genomic DNA specific cDNA library Homo sapiens cDNA clone CR12-1
735	13609	26165	19.5	1.0E-35	AW389473.1	EST_HUMAN	IL2-ST0162-131099-006-d12 ST0162 Homo sapiens cDNA

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
735	13509	28168	19.5	1.0E-35	AW389473.1	EST_HUMAN	IL2-ST0162-131099-006-412 ST0162 Homo sapiens cDNA
889	13658		1.3	1.0E-35	T87847.1	EST_HUMAN	yt83a01.1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:115762 5' similar to SP-A44282 A44282 RETROVIRUS-RELATED POLYPROTEIN - HUMAN ;
2544	15258	27096	1.88	1.0E-35	7705994	NT	Homo sapiens hypothetical protein (LOC51233), mRNA
2770	15475	28217	1.09	1.0E-35	BE350127.1	EST_HUMAN	h09g01.x1 NCI_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3146258 3' similar to contains MER29.b3
2770	15475	28218	1.09	1.0E-35	BE350127.1	EST_HUMAN	h08g01.x1 NCI_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3146258 3' similar to contains MER29.b3
3140	15804	28549	1.81	1.0E-35	6006030	NT	MER29 repetitive element ;
3161	15924	28570	3.3	1.0E-35	AV650422.1	EST_HUMAN	Homo sapiens transcription elongation factor B (SII), polypeptide 1-like (TCB1L), mRNA
3161	15924	28571	3.3	1.0E-35	AV650422.1	EST_HUMAN	AV650422 GLC Homo sapiens cDNA clone GLCCEP08 3'
4388	17125	29756	3.93	1.0E-35	7656605	NT	AV650422 GLC Homo sapiens cDNA clone GLCCEP08 3'
4388	17125	29757	3.93	1.0E-35	7656605	NT	Mus musculus actin receptor interacting protein 1 (Arp1-pending), mRNA
5423	18222	30934	1.41	1.0E-35	11526238	NT	Mus musculus actin receptor interacting protein 1 (Arp1-pending), mRNA
7383	20063	33141	0.86	1.0E-35	AB033105.1	NT	Homo sapiens chromatin assembly factor 1, subunit B (p60) (CHAF1B), mRNA
7641	20211	33311	1.18	1.0E-35	11418002	NT	Homo sapiens mRNA for KIAA1279 protein, partial cds
9442	25125	35297	2.16	1.0E-35	AU158595.1	EST_HUMAN	Homo sapiens KIAA0845 gene product (KIAA0845), mRNA
9442	25125	35298	2.16	1.0E-35	AU158595.1	EST_HUMAN	AU158595 PLAGE3 Homo sapiens cDNA clone PLACE3000382 3'
10477	23123	36352	0.7	1.0E-35	BF589594.1	EST_HUMAN	AU158595 PLAGE3 Homo sapiens cDNA clone PLACE3000382 3'
10477	23123	36353	0.7	1.0E-35	BF589594.1	EST_HUMAN	nas06d08.x1 NCI_CGAP_P28 Homo sapiens cDNA clone IMAGE:3254051 3' similar to TR:O31341
11758	24348	37680	1.46	1.0E-35	AB028980.1	NT	O31341 BETA-GALACTOSIDASE ;
11758	24348	37681	1.46	1.0E-35	AB028980.1	NT	Homo sapiens mRNA for KIAA1057 protein, partial cds
11798	24359		1.91	1.0E-35	AI525119.1	EST_HUMAN	Homo sapiens mRNA for KIAA1057 protein, partial cds
11917	25313		1.37	1.0E-35	11418274	NT	promine-7.D01.r bvtumor Homo sapiens cDNA 5'
12121	24613		1.63	1.0E-35	11418110	NT	Homo sapiens fibrin 1 (FBLN1), mRNA
12471	24637		2.13	1.0E-35	BE792832.1	EST_HUMAN	Homo sapiens casein kinase 1, epsilon (CSNK1E), mRNA
9129	21817	34983	0.56	8.0E-36	AA348480.1	EST_HUMAN	601584833FT NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3839885 5'
2931	15697	28344	1.1	7.0E-36	AW857579.1	EST_HUMAN	EST54638 Hippocampus II Homo sapiens cDNA 5' end similar to similar to endogenous retrovirus 9, 5' LTR
3116	18981		3.84	7.0E-36	4557498	NT	GM1-GT0315-091239-063-007 GT0315 Homo sapiens cDNA
7554	20224	33327	5.92	7.0E-36	U06672.1	NT	Homo sapiens C-terminal binding protein 2 (CTBP2), mRNA
7554	20224	33328	5.92	7.0E-36	U06672.1	NT	Human carcinoembryonic antigen gene family member 12 (CGM12) gene, exons L and LN
							Human carcinoembryonic antigen gene family member 12 (CGM12) gene, exons L and LN

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Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1998	14734	27456	2	6.0E-36	7706822	NT	Homo sapiens nhrinr 2 (NINL2), mRNA
2418	15139		5.58	6.0E-36	AB035346.1	NT	Homo sapiens TCL6 gene, exon 12
3630	16383	29023	0.71	6.0E-36	BF515101.1	EST_HUMAN	UIH-BW1-ant-c-12-0-UI-1 NCI CGAP Sub7 Homo sapiens cDNA clone IMAGE:3083542 3'
5248	18054	30682	3.54	6.0E-36	AI435169.1	EST_HUMAN	th3b06x1 Soares NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:2126105 3' similar to gb:M11949 PANCREATIC SECRETORY TRYPSIN INHIBITOR PRECURSOR (HUMAN);
7009	19701	32756	3.57	6.0E-36	AW780143.1	EST_HUMAN	h006102.x1 NCI CGAP Co14 Homo sapiens cDNA clone IMAGE:3036627 3' similar to SW:IMA2_HUMAN
8550	21242	34385	2.33	6.0E-36	AF208161.1	NT	P82282 IMPORTIN ALPHA-2 SUBUNIT;
10125	22773		0.51	6.0E-36	C19827.1	EST_HUMAN	Homo sapiens synofin precursor, mRNA, complete cds
11536	24136	37443	3.11	6.0E-36	AI380499.1	EST_HUMAN	C16927 Clontech human aorta polyA+ mRNA (#8572) Homo sapiens cDNA clone GEN-535C11 5'
134	12949	25582	10.74	5.0E-36	AJ271735.1	NT	h95c09.x1 NCI CGAP CLL1 Homo sapiens cDNA clone IMAGE:2107024 3' similar to contains MER9.b2
2755	15460	28202	5.75	5.0E-36	BE388496.1	EST_HUMAN	MER9 repetitive element;
3599	16352	28891	1.45	5.0E-36	AL163209.2	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
4736	17468	30104	2.15	5.0E-36	5729729	NT	Homo sapiens API5-like 1 (API5L.1), mRNA
4736	17468	30105	2.15	5.0E-36	5729729	NT	Homo sapiens API5-like 1 (API5L.1), mRNA
7686	20350	33464	0.61	5.0E-36	11079227	NT	Homo sapiens N-ethylmaleimide-sensitive factor (NSF), mRNA
11867	12949	25592	3.63	5.0E-36	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
12186	24650	31103	3.45	5.0E-36	11417862	NT	Homo sapiens caldesmon binding protein 1 (KIAA0330), mRNA
1203	13955	26619	1.69	4.0E-36	BE010038.1	EST_HUMAN	Homo sapiens caldesmon binding protein 1 (KIAA0330), mRNA
1423	14170	26856	1.03	4.0E-36	P10286	SWISSPROT	PM9-BN0176-100-400-001-g04 BN0176 Homo sapiens cDNA
1640	14386	27074	1.81	4.0E-36	BE382574.1	EST_HUMAN	RETROVIRUS-RELATED POL POLYPROTEIN [CONTAINS: REVERSE TRANSCRIPTASE ;
2219	14947		2.13	4.0E-36	AW247772.1	EST_HUMAN	ENDONUCLEASE]
3349	16108	28763	0.82	4.0E-36	BE389289.1	EST_HUMAN	601288574F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3628386 5'
3349	16108	28764	0.82	4.0E-36	BE389289.1	EST_HUMAN	2820020.Sprfme NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2820020 5'
6629	18425		0.84	4.0E-36	R84023.1	EST_HUMAN	601282268F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3604168 5'
5964	18745	31707	2.33	4.0E-36	11497041	NT	601282268F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3604168 5'
7553	20223	33326	1.63	4.0E-36	M33320.1	NT	Y18105.1 Soares placenta Nb2-IP Homo sapiens cDNA clone IMAGE:139713 5'
8453	21145	34285	1.62	4.0E-36	D87675.1	NT	Homo sapiens a disintegrin and metalloproteinase domain 22 (ADAM22), transcript variant 3, mRNA
8453	21145	34286	1.62	4.0E-36	D87675.1	NT	Human platelet Glycoprotein IIb (GP1Ib) gene, exons 2-29
10909	23589	36835	2.84	4.0E-36	AA400370.1	EST_HUMAN	Homo sapiens DNA for amyloid precursor protein, complete cds
12183	24655		2.09	4.0E-36	11420516	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
12227	25199		7.3	4.0E-36	AV753629.1	EST_HUMAN	zu69c10.r1 Soares testis NHT Homo sapiens cDNA clone IMAGE:743250 5'
							Homo sapiens nuclear factor of activated T-cells, cytoplasmic 2 (NFATC2), mRNA
							AV753629 TP Homo sapiens cDNA clone TFGABH01 5'

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12798	25047		1.44	4.0E-36	D25217.2	NT	Homo sapiens mRNA for KIAA0027 protein, partial cds
680	13455	26100	2.58	3.0E-36	AF09810.1	NT	Homo sapiens neurodin III-alpha gene, partial cds
1484	14231	26917	1.32	3.0E-36	AF110238.1	NT	Homo sapiens calcium/calmodulin-stimulated cyclic nucleotide phosphodiesterase (PDE1A) gene, partial cds
1484	14231	26918	1.32	3.0E-36	AF110238.1	NT	Homo sapiens calcium/calmodulin-stimulated cyclic nucleotide phosphodiesterase (PDE1A) gene, partial cds
2297	15022	27157	1.21	3.0E-36	7662401	NT	Homo sapiens KIAA0952 protein (KIAA0952), mRNA
4467	17203	28829	6.88	3.0E-36	10181130	NT	Mus musculus junctophilin 1 (Jp1-pending), mRNA
11050	23720	36891	1.59	3.0E-36	BF035327.1	EST_HUMAN	601458531F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3662086 5'
3187	15630	28579	2.38	2.0E-36	BE269287.1	EST_HUMAN	601106343F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3342706 5'
4904	17631	30248	5.45	2.0E-36	AW880376.1	EST_HUMAN	QV0-OT0030-240300-174-H04 OT0030 Homo sapiens cDNA
5398	18198	30892	3.1	2.0E-36	AF267747.1	NT	Mus musculus p47-phox gene, complete cds
5768	18550	31471	3.05	2.0E-36	T08758.1	EST_HUMAN	EST06948 Infant Brain, Bento Soares Homo sapiens cDNA clone HIBB128 5' end
6481	19248	32248	12.22	2.0E-36	T69629.1	EST_HUMAN	yc44a07.1 Stratagene liver (#937224) Homo sapiens cDNA clone IMAGE:83508 5'
9288	21955	35126	1.07	2.0E-36	BF512794.1	EST_HUMAN	UIH-BW1-armu-a-11-0-UI.s1 NCL_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3071132 3'
9449	21999	35172	0.79	2.0E-36	4507848	NT	Homo sapiens ubiquitin specific protease 13 (isopeptidase T-3) (USP13) mRNA
9449	21999	35173	0.79	2.0E-36	4507848	NT	Homo sapiens ubiquitin specific protease 13 (isopeptidase T-3) (USP13) mRNA
865	13634	26304	1.81	1.0E-36	BE409310.1	EST_HUMAN	601300938F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3635480 5'
2141	14871	27803	1	1.0E-36	BE148523.1	EST_HUMAN	RC1-HT0217-131189-021-H07 HT0217 Homo sapiens cDNA
2141	14871	27804	1	1.0E-36	BE148523.1	EST_HUMAN	RC1-HT0217-131189-021-H07 HT0217 Homo sapiens cDNA
2199	14928	27664	1.36	1.0E-36	BF073781.1	EST_HUMAN	602136483F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4272886 5'
3330	18090		1.16	1.0E-36	AF156862.1	NT	Homo sapiens human endogenous retrovirus W proC8-19 protease (pro) gene, partial cds
5810	18569	31527	1.29	1.0E-36	4827064	NT	Homo sapiens zinc finger protein 147 (estrogen-responsive finger protein) (ZNF147) mRNA
6090	18968		4.19	1.0E-36	AI867714.1	EST_HUMAN	wf37c12.x1 NCL_CGAP_GC6 Homo sapiens cDNA clone IMAGE:2307862 3' similar to contains Alu repetitive element
6296	19089	32052	1.21	1.0E-36	R25012.1	EST_HUMAN	y336g10.1 Soares Infant brain 1N1B Homo sapiens cDNA clone IMAGE:34528 5' similar to SP:CAHP_HUMAN P35219 CARBONIC ANHYDRASE-RELATED PROTEIN ;
6296	19089	32053	1.21	1.0E-36	R25012.1	EST_HUMAN	y336g10.1 Soares Infant brain 1N1B Homo sapiens cDNA clone IMAGE:34528 5' similar to SP:CAHP_HUMAN P35219 CARBONIC ANHYDRASE-RELATED PROTEIN ;
6582	19345	32359	0.73	1.0E-36	AL120542.1	EST_HUMAN	DKFZp761A229.1 761 (synonym: hamy2) Homo sapiens cDNA clone DKFZp761A229 5'
7326	20009	33087	0.85	1.0E-36	11426108	NT	Homo sapiens a disintegrin and metalloproteinase domain 11 (ADAM11), mRNA
7326	20009	33088	0.85	1.0E-36	11426108	NT	Homo sapiens a disintegrin and metalloproteinase domain 11 (ADAM11), mRNA
7800	20555	33679	5.13	1.0E-36	AA148034.1	EST_HUMAN	z051a12.1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone IMAGE:590398 5'
7800	20555	33680	5.13	1.0E-36	AA148034.1	EST_HUMAN	z051a12.1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone IMAGE:590398 5'

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7952	20647	33770	1.34	1.0E-36	AA420467.1	EST_HUMAN	nc60e08.r1 NCI_CGAP_P1 Homo sapiens cDNA clone IMAGE:745670
7952	20647	33771	1.34	1.0E-36	AA420467.1	EST_HUMAN	nc60e08.r1 NCI_CGAP_P1 Homo sapiens cDNA clone IMAGE:745670
8079	20773	33902	0.61	1.0E-36	AU141688.1	EST_HUMAN	AU141688 THYRO1 Homo sapiens cDNA clone THYRO1001033 5'
8079	20773	33903	0.61	1.0E-36	AU141688.1	EST_HUMAN	AU141688 THYRO1 Homo sapiens cDNA clone THYRO1001033 5'
8927	21618	34762	2.71	1.0E-36	AW103658.1	EST_HUMAN	w882b07.x1 NCI_CGAP_Bm35 Homo sapiens cDNA clone IMAGE:2814357 3'
10014	22662	35878	3.88	1.0E-36	BF364169.1	EST_HUMAN	QV3-NN1023-01000-198-h01 NN1023 Homo sapiens cDNA
10226	22874	36086	0.56	1.0E-36	AW855988.1	EST_HUMAN	RC3-CT0279-040500-017-a10 CT0279 Homo sapiens cDNA
10226	22874	36087	0.56	1.0E-36	AW855988.1	EST_HUMAN	RC3-CT0279-040500-017-a10 CT0279 Homo sapiens cDNA
10897	23547	36795	3.3	1.0E-36	AW897636.1	EST_HUMAN	CM3-NN0061-140400-147-h12 NN0061 Homo sapiens cDNA
11354	24044	37347	4.17	1.0E-36	AW504143.1	EST_HUMAN	UHIF-BN0-ale-c-03-0-JLr1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3078277 5'
11393	23999	37302	1.45	1.0E-36	AB05536.1	EST_HUMAN	RC-BT091-210199-110 BT091 Homo sapiens cDNA
11393	23999	37303	1.45	1.0E-36	AB05536.1	EST_HUMAN	RC-BT091-210199-110 BT091 Homo sapiens cDNA
12060	24575		3.81	1.0E-36	11418177	NT	Homo sapiens Ran GTPase activating protein 1 (RANGAP1), mRNA
12501	24855		3.03	1.0E-36	AL163213.2	NT	Homo sapiens chromosome 21 segment HS21C013
12747	25011		3.23	1.0E-36	AF20723.1	NT	Homo sapiens Sad1 uno-84 domain protein 2 (SUN2) mRNA, partial cds
7281	19865	33042	2.12	9.0E-37	AW009277.1	EST_HUMAN	w882b07.x1 NCI_CGAP_Co3 Homo sapiens cDNA clone IMAGE:2504245 3'
7281	19865	33043	2.12	9.0E-37	AW009277.1	EST_HUMAN	w882b07.x1 NCI_CGAP_Co3 Homo sapiens cDNA clone IMAGE:2504245 3'
12309	24733		1.35	9.0E-37	W22618.1	EST_HUMAN	73D4 Human retina cDNA Tap5091-cleaved sublibrary Homo sapiens cDNA not directional
3350	19109	28765	0.99	8.0E-37	4757979	NT	Homo sapiens chimerin (chimaerin) 2 (CHN2) mRNA
5168	17977		1.58	8.0E-37	BE68077.1	EST_HUMAN	CM0-UT0003-050800-503-d09 UT0003 Homo sapiens cDNA
5738	18530	31451	3.75	8.0E-37	BE350127.1	EST_HUMAN	h09g01.x1 NCI_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3146256 3' similar to contains MER29.b3
5738	18530	31452	3.75	8.0E-37	BE350127.1	EST_HUMAN	MER29 repetitive element;
5787	18578	31507	8.24	8.0E-37	AW840840.1	EST_HUMAN	RC1-CN0008-210100-012-a09_1 CN0008 Homo sapiens cDNA
7784	20479	33804	6.22	8.0E-37	X87344.1	NT	H. sapiens DNA, DMB, HLA-Z1, IIP2, LMP2, TAP1, LMP7, TAP2, DOB, DQB2 and RING8, 9, 13 and 14 genes
1262	14011		3.03	7.0E-37	AL042800.1	EST_HUMAN	DKFZp434E0422_r1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434E0422 5'
1738	14480	27179	0.97	7.0E-37	AF111167.2	NT	Homo sapiens jun dimerization protein gene, partial cds; cfos gene, complete cds; and unknown gene
1738	14480	27180	0.97	7.0E-37	AF111167.2	NT	Homo sapiens jun dimerization protein gene, partial cds; cfos gene, complete cds; and unknown gene
10657	23348	36585	8.69	7.0E-37	AB17700.1	EST_HUMAN	wk25b11.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2413341 3' similar to contains PTR5.12 PTR5 repetitive element;



Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10811	23494	36729	2.25	7.0E-37	AI535702.1	EST_HUMAN	Im87g03.x1 NCL_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2165140 3' similar to contains L1.b3 L1 repetitive element:
8338	21031	34168	1.34	6.0E-37	AF109899.1	NT	Homo sapiens protocadherin alpha 10 alternate isoform (PCDH-alpha10) mRNA, complete cds
12824	24929		2.84	6.0E-37	AF202723.1	NT	Homo sapiens Sad1 uno-84 domain protein 2 (SUN2) mRNA, partial cds
6002	18783	31744	3.9	5.0E-37	AA307123.1	EST_HUMAN	EST178035 Colon carcinoma (HCC) cell line Homo sapiens cDNA 5' end
6002	18783	31746	3.9	6.0E-37	AA307123.1	EST_HUMAN	EST178035 Colon carcinoma (HCC) cell line Homo sapiens cDNA 5' end
8854	21348	34490	0.9	5.0E-37	AV750211.1	EST_HUMAN	AV750211 NPC Homo sapiens cDNA clone NPCBHG09 5'
10837	23519		4	5.0E-37	7657117	NT	Homo sapiens glycine C-acetyltransferase (2-amino-3-ketobutyrate-CoA ligase) (GCAT), mRNA
12055	24572		6.86	5.0E-37	AF149773.1	NT	Homo sapiens NOD1 protein (NOD1) gene, exons 1, 2, and 3
2423	15144	27877	2.12	4.0E-37	AA702794.1	EST_HUMAN	z60604.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:448015 3'
8184	18970	31945	0.81	4.0E-37	AW784902.1	EST_HUMAN	RC8-UM0014-210200-021-H05 UM0014 Homo sapiens cDNA
9256	21635	35109	0.74	4.0E-37	AA843806.1	EST_HUMAN	ek09c02.s1 Soares_papillary_tumor_NbHPA Homo sapiens cDNA clone IMAGE:1405442 3'
2010	14745	27472	3.2	3.0E-37	AL048956.1	EST_HUMAN	DKFZp434L2418_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434L2418
2010	14745	27473	3.2	3.0E-37	AL048956.1	EST_HUMAN	DKFZp434L2418_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434L2418
2865	15731		3.15	3.0E-37	AW981150.1	EST_HUMAN	EST373222 IMAGE resequences, MAGF Homo sapiens cDNA
5774	18565	31494	0.92	3.0E-37	AL138274.1	EST_HUMAN	DKFZp547G087_r1 547 (synonym: hfbt1) Homo sapiens cDNA clone DKFZp547G087 5'
7455	20129	33221	0.71	3.0E-37	A1746952.1	EST_HUMAN	al34c05.x1 Barstead colon HPLRB7 Homo sapiens cDNA clone IMAGE:2373896 3' similar to TR-Q13537 Q13537 SIMILAR TO POGO ELEMENT.:
372	13197	26842	0.89	2.0E-37	D89780.1	NT	Homo sapiens mRNA for AML1, complete cds
372	13197	25843	0.88	2.0E-37	D89780.1	NT	Homo sapiens mRNA for AML1, complete cds
1058	13816	26477	2.84	2.0E-37	AU131202.1	EST_HUMAN	AU131202 NT2RP3 Homo sapiens cDNA clone NT2RP3002168 5'
1058	13816	26478	2.84	2.0E-37	AU131202.1	EST_HUMAN	AU131202 NT2RP3 Homo sapiens cDNA clone NT2RP3002168 5'
1856	14682	27405	1.87	2.0E-37	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
3873	18623	28281	4.78	2.0E-37		NT	Homo sapiens cytochrome P450, subfamily XXV1A (steroid 27-hydroxylase, cerebrotendinous xanthomatosis), polypeptide 1 (CYP27A1b) mRNA
4988	17683		0.93	2.0E-37	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
5304	18109		0.80	2.0E-37	BF03537.1	EST_HUMAN	801458531F1 NIH_MGC 66 Homo sapiens cDNA clone IMAGE:3862086 5'
6561	19326	32333	3.46	2.0E-37	AA346720.1	EST_HUMAN	EST52331 Fetal heart II Homo sapiens cDNA 5' end
7895	20590	33720	0.46	2.0E-37	BE537764.1	EST_HUMAN	601067534F1 NIH_MGC 10 Homo sapiens cDNA clone IMAGE:3453657 5'
7895	20590	33721	0.46	2.0E-37	BE537764.1	EST_HUMAN	601067534F1 NIH_MGC 10 Homo sapiens cDNA clone IMAGE:3453657 5'
7937	20632	33759	2.88	2.0E-37	BF204032.1	EST_HUMAN	601869157F1 NIH_MGC 17 Homo sapiens cDNA clone IMAGE:4111406 5'
11549	24148	37459	11.22	2.0E-37	AF178013.1	NT	Homo sapiens J domain containing protein 1 isoform b (JDP1) mRNA, complete cds
12784	25037		3.54	2.0E-37	11417972	NT	Homo sapiens pascadillo (zabrafish) homolog 1, containing BRCT domain (PES1), mRNA
2081	14813	27546	4.93	1.0E-37	AL163281.2	NT	Homo sapiens chromosome 21 segment HS21C081

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3192	15955		1.08	1.0E-37	AW862082.1	EST_HUMAN	RC3-CT0347-210400-016-H03 CT0347 Homo sapiens cDNA
3943	16993	29332	0.72	1.0E-37	AF189011.1	NT	Homo sapiens ribonuclease III (RN3) mRNA, complete cds
4898	17615	30234	2.35	1.0E-37	BF371719.1	EST_HUMAN	QV0-FN0180-280700-318-c10 FN0180 Homo sapiens cDNA
5914	19699		0.94	1.0E-37	7305360	NT	Mus musculus otogelin (Otog), mRNA
8113	20807	33940	1.25	1.0E-37	BE546032.1	EST_HUMAN	601072419F1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3456308 5'
8634	21326	34468	2.57	1.0E-37	AA171406.1	EST_HUMAN	zp21b02.r1 Stralagene neuroepithelium (#837231) Homo sapiens cDNA clone IMAGE:610059 5' similar to contains L1.12 L1 repetitive element:
10597	23281	36529	2.98	1.0E-37	M22878.1	NT	Human somatic cytochrome c (HC1) processed pseudogene, complete cds
12363	24766		2.81	1.0E-37	BE771814.1	EST_HUMAN	CN3-F10096-140700-243-d07 F10096 Homo sapiens cDNA
5690	18483	31402	2	9.0E-38	10048482	NT	Rattus norvegicus multidomain presynaptic cytomatrix protein Piccolo (LOC56768), mRNA
1200	13952	26616	2.02	8.0E-38	11436955	NT	Homo sapiens Grib2-associated binder 2 (KIAA0571), mRNA
2502	15219	27962	1.8	8.0E-38	BF346221.1	EST_HUMAN	602018401F1 NCL_CGAP_Brm67 Homo sapiens cDNA clone IMAGE:4153992 5'
12420	13952	26616	1.8	8.0E-38	11436955	NT	Homo sapiens Grib2-associated binder 2 (KIAA0571), mRNA
4197	19638	29563	0.73	7.0E-38	H19092.1	EST_HUMAN	yn51b07.r1 Soares adult brain N2b3-1B55Y Homo sapiens cDNA clone IMAGE:171973 5'
5039	17758		1.31	7.0E-38	AF287263.1	NT	Mus musculus ATP-binding cassette 1, sub-family A, member 1 (Abca1) gene, complete cds
3037	15803	28450	1.2	6.0E-38	BF033033.1	EST_HUMAN	601455722F1 NIH_MGC_60 Homo sapiens cDNA clone IMAGE:3866348 5'
5502	18300	31189	1.6	6.0E-38	11425114	NT	Homo sapiens zinc finger protein ZNF287 (ZNF287), mRNA
5502	18300	31200	1.6	6.0E-38	11425114	NT	Homo sapiens zinc finger protein ZNF287 (ZNF287), mRNA
7228	19913	32986	0.57	8.0E-38	8923130	NT	Homo sapiens zinc finger protein ZNF287 (ZNF287), mRNA
11918	24480		2.57	8.0E-38	11435947	NT	Homo sapiens hypothetical protein FLJ20128 (FLJ20128), mRNA
12395	24783	31038	12.79	6.0E-38	AB002059.1	NT	Homo sapiens chromosome 12 open reading frame 3 (C12ORF3), mRNA
12787	25161	30900	1.7	6.0E-38	11418164	NT	Homo sapiens DNA for Human P2XM, complete cds
710	13484	26133	1.38	6.0E-38	AW971819.1	EST_HUMAN	Homo sapiens adenylosuccinate lyase (ADSL), mRNA
2455	15173	27912	0.99	5.0E-38	AJ237740.1	NT	EST363908 IMAGE resequences, MAGL Homo sapiens cDNA
3849	16446	29086	0.85	5.0E-38	7549804	NT	Homo sapiens RIBLIR gene (partial), exon 8
3917	16667	29307	0.92	5.0E-38	T83107.1	EST_HUMAN	Homo sapiens deiodinase, iodothyronine, type II (DIO2), transcript variant 2, mRNA
3917	16667	29308	0.92	5.0E-38	T83107.1	EST_HUMAN	yd40h07.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:110749 5' similar to SP:OLF3_MOUSE P23275 OLFACTORY RECEPTOR;
6930	19066	32712	1.48	5.0E-38	BE871610.1	EST_HUMAN	yd40h07.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:110749 5' similar to SP:OLF3_MOUSE P23275 OLFACTORY RECEPTOR;
118	12336	29575	4.59	4.0E-38	Z25496.1	NT	601450148F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3854074 5'
116	12336	29576	4.59	4.0E-38	Z25496.1	NT	B.taurus mitochondrial aspartate aminotransferase mRNA, complete CDS
2093	14824		5.25	3.0E-38	AF009630.1	NT	B.taurus mitochondrial aspartate aminotransferase mRNA, complete CDS
3684	16437		2.19	3.0E-38	7549807	NT	Homo sapiens homeobox protein CDX4 (CDX4) gene, complete cds and flanking repeat regions
							Homo sapiens HIRA interacting protein 4 (dnal-like) (HIRIP4), mRNA

Table 4  
Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3836	16587	29224	1.78	3.0E-38	P53338	SWISSPROT	SSU72 PROTEIN
3836	16587	29225	1.78	3.0E-38	P53338	SWISSPROT	SSU72 PROTEIN
4574	17309		1.47	3.0E-38	BE278301.1	EST_HUMAN	601157633F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3504272 5'
6655	25097	32430	8.11	3.0E-38	AL163300.2	NT	Homo sapiens chromosome 21 segment HS21C100
7144	19831	32900	0.68	3.0E-38	AW302461.1	EST_HUMAN	xw04d01.x1 NCI_CGAP_Bim53 Homo sapiens cDNA clone IMAGE:2827009 3'
7488	20160	33252	8.26	3.0E-38	BF373684.1	EST_HUMAN	CM3-F10181-140700-241-407 F10181 Homo sapiens cDNA
8548	21240	34383	2.1	3.0E-38	H85494.1	EST_HUMAN	yw88b04.r1 Soares melanocyte 2NblHM Homo sapiens cDNA clone IMAGE:249775 5'
8548	21240	34384	2.1	3.0E-38	H85494.1	EST_HUMAN	yw88b04.r1 Soares melanocyte 2NblHM Homo sapiens cDNA clone IMAGE:249775 5'
9872	22522		2.24	3.0E-38	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C048
12630	17896	30488	1.65	3.0E-38	11435947	NT	Homo sapiens chromosome 12 open reading frame 3 (C12ORF3), mRNA
49	12878	25504	1.4	2.0E-38	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C048
1338	14106	26781	2.89	2.0E-38	5902087	NT	Homo sapiens SMT3 (suppressor of mit two 3, yeast) homolog 2 (SMT3H2), mRNA
1641	14387	27076	2.21	2.0E-38	AA437353.1	EST_HUMAN	zw30d01.r1 Soares ovary tumor NblHOT Homo sapiens cDNA clone IMAGE:770785 5' similar to SW:MA12_RABIT P45701 MANNOSYL-OLIGOSACCHARIDE ALPHA-1,2-MANNOSIDASE ;
1641	14387	27076	2.21	2.0E-38	AA437353.1	EST_HUMAN	zw30d01.r1 Soares ovary tumor NblHOT Homo sapiens cDNA clone IMAGE:770785 5' similar to SW:MA12_RABIT P45701 MANNOSYL-OLIGOSACCHARIDE ALPHA-1,2-MANNOSIDASE ;
2408	16120	27865	1.45	2.0E-38	W76571.1	EST_HUMAN	zdf6g08.r1 Soares_fetal_hear NblHH19W Homo sapiens cDNA clone IMAGE:345684 5'
5632	18427	31339	0.69	2.0E-38	Z26834.2	NT	Homo sapiens mRNA for ankyrin B (440 kDa)
5632	18427	31340	0.69	2.0E-38	Z26834.2	NT	Homo sapiens mRNA for ankyrin B (440 kDa)
7619	20285	33395	1.48	2.0E-38	AV721103.1	EST_HUMAN	AV721103 HTB Homo sapiens cDNA clone HTBARH11 5'
8382	21075		4.38	2.0E-38	BE165980.1	EST_HUMAN	MR3-HT0487-150200-113-g01 HT0487 Homo sapiens cDNA
8793	21485	34631	0.66	2.0E-38	F06450.1	EST_HUMAN	HSC18f031 normalized infant brain cDNA Homo sapiens cDNA clone c-18f03
8864	21555	34700	2.04	2.0E-38	AF069755.1	NT	Homo sapiens orphan G protein-coupled receptor HG20 (HG20) mRNA, complete cds
9121	21809		1.06	2.0E-38	BE272256.1	EST_HUMAN	hu09g02.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3166130 3' similar to TR:O02710 O02710 GAG POLYPROTEIN ;
10346	22993	36212	1.71	2.0E-38	D63479.2	NT	Homo sapiens mRNA for KIAA0145 protein, partial cds
11200	23865	37151	1.37	2.0E-38	AA595480.1	EST_HUMAN	nc034g03.s1 NCI_CGAP_P23 Homo sapiens cDNA clone IMAGE:1102812 3' similar to TR:E212316 E212316 NADP DEPENDENT LEUKOTREINE B4 12-HYDROXYDEHYDROGENASE ;
11200	23865	37152	1.37	2.0E-38	AA595480.1	EST_HUMAN	nc034g03.s1 NCI_CGAP_P23 Homo sapiens cDNA clone IMAGE:1102812 3' similar to TR:E212316 E212316 NADP DEPENDENT LEUKOTREINE B4 12-HYDROXYDEHYDROGENASE ;
11472	24073	37382	5.79	2.0E-38	BE172790.1	EST_HUMAN	QV2-HT0698-080800-293-405 HT0698 Homo sapiens cDNA
11638	24235	37557	3.52	2.0E-38	AF190501.1	NT	Homo sapiens leucine-rich repeat-containing G protein-coupled receptor 6 (LGR6) mRNA, partial cds

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11638	24236	37558	3.52	2.0E-38	AF190501.1	NT	Homo sapiens leucine-rich repeat-containing G protein-coupled receptor 6 (LGR6) mRNA, partial cds
11971	24517		3.05	2.0E-38	AV726888.1	EST_HUMAN	AV726888 HTC Homo sapiens cDNA clone HTCAHX07.5'
11973	24518		2.08	2.0E-38	AB012723.1	NT	Homo sapiens gene for kinesin-like protein, complete cds
12280	24705	31081	6.45	2.0E-38	H55841.1	EST_HUMAN	CHR220580 Chromosome 22 exon Homo sapiens cDNA clone C22_788.5'
12323	24742		1.43	2.0E-38	S74908.1	NT	E1 beta-pyruvate dehydrogenase beta [promoter] [human, placenta, Genomic, 1280 nt]
12777	25031		3.76	2.0E-38	11418248	NT	Homo sapiens sulfotransferase-related protein (SULTX3), mRNA
1071	13829		2.55	1.0E-38	AA401570.1	EST_HUMAN	z062602.1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:742639.5' similar to contains element
1992	14728	27450	2.53	1.0E-38	4885288	NT	MER19 repetitive element;
2012	14747	27476	1.11	1.0E-38	7661989	NT	Homo sapiens guanine nucleotide binding protein-like 1 (GNL1), mRNA
2489	15216	27960	2.34	1.0E-38	AF270831.1	NT	Homo sapiens KIAA0173 gene product (KIAA0173), mRNA
4290	17029	29655	1.23	1.0E-38	AL163203.2	NT	Homo sapiens cyclin K (CCNK) gene, exon 7
4290	17029	29658	1.23	1.0E-38	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
4558	17293	29821	1	1.0E-38	8922543	NT	Homo sapiens chromosome 21 segment HS21C003
5937	18719	31877	4.71	1.0E-38	7305360	NT	Homo sapiens hypothetical protein FLJ10600 (FLJ10600), mRNA
5937	18719	31678	4.71	1.0E-38	7305360	NT	Mus musculus dogelin (Odog), mRNA
7304	19987	33063	3.16	1.0E-38	AB014512.1	NT	Mus musculus dogelin (Odog), mRNA
9051	21740	34898	0.71	1.0E-38	11422250	NT	Homo sapiens mRNA for KIAA0612 protein, partial cds
9310	21977	35150	5.13	1.0E-38	BE350127.1	EST_HUMAN	Homo sapiens hypothetical protein FLJ10600 (FLJ10600), mRNA
10301	22948	36163	0.58	1.0E-38	R18512.1	EST_HUMAN	h09g01.x1 NCI_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3146256.3' similar to contains MER29.53
11588	24187	37503	1.28	1.0E-38	7662109	NT	MER29 repetitive element;
12118	25140		2.2	1.0E-38	AL163284.2	NT	y06b08.1 Soares Infant brain 1N1B Homo sapiens cDNA clone IMAGE:30486.5'
53	12892	25510	15.3	8.0E-39	4502312	NT	Homo sapiens KIAA0426 gene product (KIAA0426), mRNA
1373	14121	26796	1.45	8.0E-39	4758229	NT	Homo sapiens chromosome 21 segment HS21C004
1821	14580		1.27	8.0E-39	AB23404.1	EST_HUMAN	Homo sapiens ATPase, H+ transporting, lysosomal (vacuolar proton pump) 16kD (ATP6C) mRNA
2087	14819	27550	5.78	7.0E-39	AL163227.2	NT	Homo sapiens estrogen receptor-binding fragment-associated gene 9 (EBAG9) mRNA
10711	23400	36639	2.24	6.0E-39	BF331829.1	EST_HUMAN	wh33f10.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2384491.3' similar to TR:P87890 P87890
12096	24979		1.66	6.0E-39	BE670394.1	EST_HUMAN	POL PROTEIN;
987	13750	26412	1.57	5.0E-39	AF003528.1	NT	Homo sapiens chromosome 21 segment HS21C027
							QV1-BT0631-040900-357-02 BT0631 Homo sapiens cDNA
							7e34c03.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3284355.3' similar to WP:R151.6
							CE00828 ;
							Homo sapiens X-linked arylidic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
							cd36b04.x1 Barleed codon HPLRB7 Homo sapiens cDNA clone IMAGE:2374063 3' similar to TR:Q15408
2684	15780	28397	8.62	5.0E-39	AI750164.1	EST_HUMAN	Q15408 NEUTRAL PROTEASE LARGE SUBUNIT, contains LTR7.1 LTR7 repetitive element;
12410	24793		2.04	5.0E-39	11420289	NT	Homo sapiens hypothetical protein FLJ10803 (FLJ10803), mRNA
537	13320	25934	6.78	4.0E-39	AB016610.1	NT	Chlorococcus ethiops mRNA for ribosomal protein S4X, complete cds
3559	16314	28951	0.97	4.0E-39	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
							seq2g04.s1 Stratiogene schizo brain S11 Homo sapiens cDNA clone IMAGE:1020438 3' similar to contains
							ORF.b1 ORF repetitive element;
7974	20669	33791	1.27	4.0E-39	AA082949.1	EST_HUMAN	Homo sapiens DNA for prostacyclin synthase, exon 2
9228	21907	35078	0.56	4.0E-39	D84116.1	NT	Homo sapiens DNA for prostacyclin synthase, exon 2
9228	21907	35079	0.56	4.0E-39	D84116.1	NT	Homo sapiens Ran GTPase activating protein 1 (RANGAP1), mRNA
12427	24802		4.47	4.0E-39	11418177	NT	
12534	24878		2.71	4.0E-39	BE89452.1	EST_HUMAN	QV0-FN0063-260800-278-c08 FN0063 Homo sapiens cDNA
46	12875	25498	14.86	3.0E-39	AA631949.1	EST_HUMAN	fmfc16 Regional genomic DNA specific cDNA library Homo sapiens cDNA clone CR12-1
46	12875	25499	14.86	3.0E-39	AA631949.1	EST_HUMAN	fmfc16 Regional genomic DNA specific cDNA library Homo sapiens cDNA clone CR12-1
46	12875	25500	14.86	3.0E-39	AA631949.1	EST_HUMAN	fmfc16 Regional genomic DNA specific cDNA library Homo sapiens cDNA clone CR12-1
							cd3a10.s1 Soares_NHMPu_S1 Homo sapiens cDNA clone IMAGE:1603986 3' similar to SW:GTR5_RAT
11903	24511	37257	4.35	3.0E-39	AI084557.1	EST_HUMAN	P43427 GLUCOSE TRANSPORTER TYPE 5, SMALL INTESTINE;
							cd3a10.s1 Soares_NHMPu_S1 Homo sapiens cDNA clone IMAGE:1603986 3' similar to SW:GTR5_RAT
11903	24511	37258	4.35	3.0E-39	AI084557.1	EST_HUMAN	P43427 GLUCOSE TRANSPORTER TYPE 5, SMALL INTESTINE;
12006	24541		5.82	3.0E-39	H37903.1	EST_HUMAN	yp51c06.s1 Soares retina N2b4HR Homo sapiens cDNA clone IMAGE:190954 3'
877	13646		6.8	2.0E-39	BE409203.1	EST_HUMAN	601301607F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3636289 5'
882	13661		14.08	2.0E-39	AI525119.1	EST_HUMAN	promme-7.D01.r bvtumor Homo sapiens cDNA 5'
1009	13789		4.2	2.0E-39	AF000573.1	NT	Homo sapiens homogenized 1,2-dioxygenase gene, complete cds
1520	14287		11.91	2.0E-39	AW372318.1	EST_HUMAN	PW0-BT0340-211299-003-002 BT0340 Homo sapiens cDNA
							mw21g02.s1 NCJ_CGAP_G080 Homo sapiens cDNA clone IMAGE:1241138 3' similar to contains THR.t3
1996	14702	27416	3.28	2.0E-39	AA720374.1	EST_HUMAN	THR repetitive element;
2634	16346	28089	1.84	2.0E-39	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C048
4370	17108	28743	1.48	2.0E-39	BF370207.1	EST_HUMAN	RCA-FN0037-290700-011-010 FN0037 Homo sapiens cDNA
5403	18203	30907	4.21	2.0E-39	AA308890.1	EST_HUMAN	ng80f03.s1 NCJ_CGAP_P18 Homo sapiens cDNA clone IMAGE:941693
7269	19963	33029	2.98	2.0E-39	AA080867.1	EST_HUMAN	zr06f02.r1 Stratiogene hnt neuron (#637233) Homo sapiens cDNA clone IMAGE:546651 5'
7431	20108	33195	0.72	2.0E-39	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
7431	20108	33196	0.72	2.0E-39	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
8209	20903	34038	0.67	2.0E-39	AF078779.1	NT	Rattus norvegicus putative four repeat lon channel mRNA, complete cds
9394	22050		0.55	2.0E-39	AA984631.1	EST_HUMAN	am88c11.s1 Stratiogene schizo brain S11 Homo sapiens cDNA clone IMAGE:1630198 3'

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9526	22179		0.73	2.0E-39	A168660.1	EST_HUMAN	tu35603.x1 NCI_CGAP_P128 Homo sapiens cDNA clone IMAGE:2263052 3'
11409	24058	37365	2.97	2.0E-39	D86984.1	NT	Human mRNA for KIAA0208 gene, partial cds
1503	14249	26936	3.71	1.0E-39	AJ006345.1	NT	Homo sapiens KVLQT1 gene
1503	14249	26937	3.71	1.0E-39	AJ006345.1	NT	Homo sapiens KVLQT1 gene
1521	14268	26932	4.24	1.0E-39	7657020	NT	Homo sapiens DKFZp434P211 protein (DKFZP434P211), mRNA
4096	16841	28467	0.7	1.0E-39	11430303	NT	Homo sapiens catenin (cadherin-associated protein), alpha 2 (CTNNA2), mRNA
4096	16841	28468	0.7	1.0E-39	11430303	NT	Homo sapiens catenin (cadherin-associated protein), alpha 2 (CTNNA2), mRNA
4612	17347	29980	2.5	1.0E-39	AW951995.1	EST_HUMAN	EST364065 MAGC resequences, MAGB Homo sapiens cDNA
4612	17347	29981	2.5	1.0E-39	AW951996.1	EST_HUMAN	EST364065 MAGC resequences, MAGB Homo sapiens cDNA
4654	17388	30021	8.86	1.0E-39	7657020	NT	Homo sapiens DKFZp434P211 protein (DKFZP434P211), mRNA
5274	18079	30795	1.02	1.0E-39	11417342	NT	Homo sapiens sema domain, seven thrombospondin repeats (type 1 and type 1-like), transmembrane domain (TM) and short cytoplasmic domain, (semaforin) 5A (SEMA5A), mRNA
5274	18079	30796	1.02	1.0E-39	11417342	NT	Homo sapiens sema domain, seven thrombospondin repeats (type 1 and type 1-like), transmembrane domain (TM) and short cytoplasmic domain, (semaforin) 5A (SEMA5A), mRNA
5542	18339	31246	1.97	1.0E-39	T80876.1	EST_HUMAN	yd28g08.r1 Soares fetal liver spleen 1NLS Homo sapiens cDNA clone IMAGE:109402 5' similar to contains
5576	18375	31287	4.84	1.0E-39	AJ278170.1	NT	Alu repetitive element contains LTR1 repetitive element;
5578	18375	31288	4.84	1.0E-39	AJ278170.1	NT	Mus musculus mRNA for neuronal interacting factor X1 (NIX1) (Nix1 gene)
6727	19561		1.57	1.0E-39	11436738	NT	Mus musculus mRNA for neuronal interacting factor X1 (NIX1) (Nix1 gene)
7264	19848	33025	1.8	1.0E-39	D78132.1	NT	Homo sapiens tubby like protein 3 (TULP3), mRNA
8462	21154	34297	1.03	1.0E-39	O46530	SWISSPROT	Homo sapiens mRNA for ras-related GTP-binding protein, complete cds
12357	24781		1.34	1.0E-39	U07000.1	NT	RIBONUCLEASE K6 PRECURSOR (RNAse K6)
542	13325	25957	1.88	9.0E-40	5803210	NT	Human breakpoint cluster region (BCR) gene, complete cds
1213	13963	26620	15.14	9.0E-40	4755145	NT	Homo sapiens UDP-glucose pyrophosphorylase 2 (UGP2), mRNA
1213	13963	26630	15.14	9.0E-40	4755145	NT	Homo sapiens AE-binding protein 1 (AEBP1) mRNA
1432	14179	26865	6.54	9.0E-40	4507512	NT	Homo sapiens AE-binding protein 1 (AEBP1) mRNA
3766	16617	29155	0.97	9.0E-40	4503764	NT	Homo sapiens tissue inhibitor of metalloproteinase 3 (Sorsby fundus dystrophy, pseudoinflammatory) (TIMP3) mRNA
3856	17878	28343	3.98	9.0E-40	AB033070.1	NT	Homo sapiens fragile X mental retardation 1 (FMR1) mRNA
3036	15802	28449	0.84	8.0E-40	AA078165.1	EST_HUMAN	Homo sapiens mRNA for KIAA1244 protein, partial cds
3903	16653		3.35	8.0E-40	BE396641.1	EST_HUMAN	7H15A04 Chromosome 7 Hela cDNA Library Homo sapiens cDNA clone 7H15A04
							801288958F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3619168 5'
7616	20282	33390	2.03	7.0E-40	U80325.1	NT	Human DNA polymerase gamma mRNA, nuclear gene encoding mitochondrial protein, complete cds

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7616	20262	33391	2.03	7.0E-40	U60325.1	NT	Human DNA polymerase gamma mRNA, nuclear gene encoding mitochondrial protein, complete cds
10813	23498	36732	2.27	7.0E-40	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
2730	15437	28174	8.41	6.0E-40	AA361275.1	EST_HUMAN	EST70527 T-cell lymphoma Homo sapiens cDNA 5' end similar to similar to zinc finger protein family
2730	15437	28175	8.41	6.0E-40	AA361275.1	EST_HUMAN	EST70527 T-cell lymphoma Homo sapiens cDNA 5' end similar to similar to zinc finger protein family
5849	18638		2.24	6.0E-40	BE504766.1	EST_HUMAN	h240g01.x1 NCI_CGAP_G08 Homo sapiens cDNA clone IMAGE:3210480 3'
6055	18635		1.11	6.0E-40	7661969	NT	Homo sapiens KIAA0211 gene product (KIAA0211), mRNA
6836	19498	32522	3.56	6.0E-40	11439783	NT	Homo sapiens fatty acid desaturase 1 (FADS1), mRNA
6836	19498	32523	3.56	6.0E-40	11439783	NT	Homo sapiens fatty acid desaturase 1 (FADS1), mRNA
9877	22527	35722	10.25	6.0E-40	AV653028.1	EST_HUMAN	AV653028 GLC Homo sapiens cDNA clone GLDGGF04 3'
9877	22527	35723	10.25	6.0E-40	AV653028.1	EST_HUMAN	AV653028 GLC Homo sapiens cDNA clone GLDGGF04 3'
1889	14807	27318	1.78	4.0E-40	AI6886005.1	EST_HUMAN	h91b01.x1 NCI_CGAP_P128 Homo sapiens cDNA clone IMAGE:2248873 3' similar to TR:O73505 O73505 POL PROTEIN. ;
2101	14832		2.27	4.0E-40	AF003526.1	NT	Homo sapiens X-linked arylidic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
4358	17084	29729	9.08	4.0E-40	7682117	NT	Homo sapiens KIAA0433 protein (KIAA0433), mRNA
7786	20481	33006	0.5	4.0E-40	AU127831.1	EST_HUMAN	AU127831 NT2RP2 Homo sapiens cDNA clone NT2RP2002172 5'
7890	20585	33714	6.22	4.0E-40	AA742809.1	EST_HUMAN	mx34e10.t1 NCI_CGAP_Br4 Homo sapiens cDNA clone IMAGE:1222122
8953	21844	34793	6.17	4.0E-40	BE009416.1	EST_HUMAN	PMO-BN0167-070500-002-h12 BN0167 Homo sapiens cDNA
8953	21844	34794	5.17	4.0E-40	BE009416.1	EST_HUMAN	PMO-BN0167-070500-002-h12 BN0167 Homo sapiens cDNA
10618	23309	36548	3.03	4.0E-40	AW841585.1	EST_HUMAN	RC1-CN0017-120200-012-e04 CN0017 Homo sapiens cDNA
4111	18854	29481	1.02	3.0E-40	AI925949.1	EST_HUMAN	wh1207.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2380549 3'
8543	19308	32313	7.02	3.0E-40	11417342	NT	Homo sapiens sema domain, seven thrombospondin repeats (type 1 and type 1-like), transmembrane domain (TM) and short cytoplasmic domain, (semaforin) 5A (SEMA5A), mRNA
8280	20974	34115	3.62	3.0E-40	5454167	NT	Homo sapiens HBV associated factor (XAP4), mRNA
8868	21559	34704	1.25	3.0E-40	AF078778.1	NT	Rattus norvegicus putative four repeat ion channel mRNA, complete cds
9111	21789	34963	1.42	3.0E-40	AF078779.1	NT	Rattus norvegicus putative four repeat ion channel mRNA, complete cds
11232	23895	37182	8.36	3.0E-40	6005813	NT	Homo sapiens serine threonine protein kinase (NDR), mRNA
11563	24162	37473	2.23	3.0E-40	AW118799.1	EST_HUMAN	xd8d102.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2605491 3' similar to TR:Q15804 Q15804 SIMILAR TO ENV OF TYPE A AND TYPE B RETROVIRUSES AND TO CLASS II HERV5 ;
317	13120		8.53	2.0E-40	AI223036.1	EST_HUMAN	qg52n08.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1838847 3'

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
777	13549		1.61	2.0E-40	AW303888.1	EST_HUMAN	x24e10.x1 NCL_CGAP_U4 Homo sapiens cDNA clone IMAGE:2761088 3' similar to SW:RS5_MOUSE
1818	14557		0.92	2.0E-40	AV731601.1	EST_HUMAN	P97461 40S RIBOSOMAL PROTEIN S6 ;
1927	14883	27375	1.58	2.0E-40		NT	AV731601 HTF Homo sapiens cDNA clone HTFAZE05 5'
1927	14883	27376	1.58	2.0E-40	4506188	NT	Homo sapiens proteasome (prosome, macropain) subunit, alpha type, 7 (PSMA7) mRNA, and translated products
2064	14798	27522	1.21	2.0E-40	4506188	NT	Homo sapiens proteasome (prosome, macropain) subunit, alpha type, 7 (PSMA7) mRNA, and translated products
2166	14895	27630	2.48	2.0E-40	4506188	NT	w60a11.x1 NCL_CGAP_GC8 Homo sapiens cDNA clone IMAGE:2514716 3' similar to TR:Q91929 Q91929
2895	15404		1.44	2.0E-40	5453592	EST_HUMAN	ZINC FINGER PROTEIN ;
3123	15888	28529	4.28	2.0E-40	BE275932.1	EST_HUMAN	Homo sapiens adenyl cyclase-associated protein 2 (CAP2) mRNA
4843	17573	30187	1.08	2.0E-40	6463592	NT	601121587F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3345784 5'
4843	17573	30188	1.08	2.0E-40	AL163280.2	NT	Homo sapiens adenyl cyclase-associated protein 2 (CAP2) mRNA
863	13632		1.78	1.0E-40	AA225889.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C080
2627	15339	28083	0.93	1.0E-40	BF036881.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C080
2692	15401		1.34	1.0E-40	BE018348.1	EST_HUMAN	nc08a09.s1 NCL_CGAP_P1 Homo sapiens cDNA clone IMAGE:1007608
2741	15447	28185	1.18	1.0E-40	BF541030.1	EST_HUMAN	601460375F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3963803 5'
2741	15447	28186	1.18	1.0E-40	BF541030.1	EST_HUMAN	b678a10.y1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3046570 5' similar to TR:Q8Z158 Q8Z158
3282	16053		1.27	1.0E-40	4507142	NT	SYNTAXIN 17 ;
4571	17308	28834	4.52	1.0E-40	4508012	NT	602068604F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:4067736 5'
6161	18938	31907	0.75	1.0E-40	W92708.1	EST_HUMAN	602068604F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:4067736 5'
6161	18938	31908	0.75	1.0E-40	W92708.1	EST_HUMAN	Homo sapiens sorting nexin 3 (SNX3) mRNA
6887	19680	32727	1.77	1.0E-40	AA573201.1	EST_HUMAN	Homo sapiens zinc finger protein 200 (ZNF200) mRNA, and translated products
6887	19680	32728	1.77	1.0E-40	AA573201.1	EST_HUMAN	zh79f11.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:418317 3'
7133	19820	32888	0.69	1.0E-40	P26808	SWISSPROT	zh79f11.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:418317 3'
10834	23516	36758	8.34	1.0E-40	AU146345.1	EST_HUMAN	h420d4.s1 NCL_CGAP_AA1 Homo sapiens cDNA clone IMAGE:995167 3'
11694	24289	37612	1.89	1.0E-40	AA614255.1	EST_HUMAN	h420d4.s1 NCL_CGAP_AA1 Homo sapiens cDNA clone IMAGE:995167 3'
11694	24289	37613	1.89	1.0E-40	AA614255.1	EST_HUMAN	POL POLYPROTEIN [CONTAINS: PROTEASE ; REVERSE TRANSCRIPTASE ; RIBONUCLEASE H]
12376	25274		10.09	1.0E-40	BF334112.1	EST_HUMAN	AU149345 NT2RM4 Homo sapiens cDNA clone NT2RM4002122 3'
7822	20517	33643	1.62	8.0E-41	AL163203.2	NT	np08h03.s1 NCL_CGAP_P3 Homo sapiens cDNA clone IMAGE:1115881 similar to TR:G1138408
							G1138408 KIAA0173 PROTEIN ;
							np08h03.s1 NCL_CGAP_P3 Homo sapiens cDNA clone IMAGE:1115881 similar to TR:G1138408
							G1138408 KIAA0173 PROTEIN ;
							MR2-C10222-211099-002-e10 C10222 Homo sapiens cDNA
							Homo sapiens chromosome 21 segment HS21C003



Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
809	15553	26246	1.24	7.0E-41	AB34384.1	EST_HUMAN	wp04h04.x1 NCL CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2463895 3'
800	15553	26247	1.24	7.0E-41	AB34384.1	EST_HUMAN	wp04h04.x1 NCL CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2463895 3'
4009	17344	29876	0.92	7.0E-41	BE388592.1	EST_HUMAN	601282077F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3603955 5'
4009	17344	29877	0.92	7.0E-41	BE388592.1	EST_HUMAN	601282077F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3603955 5'
5183	17991	30507	1.2	7.0E-41	11545770	NT	Homo sapiens hypothetical protein FLJ13183 (FLJ13188), mRNA
5918	18703	31656	3.49	7.0E-41	11418208	NT	Homo sapiens a disintegrin and metalloproteinase domain 22 (ADAM22), mRNA
6260	19034	32009	0.61	7.0E-41	11433010	NT	Homo sapiens IQ motif containing GTPase activating protein 1 (IQGAP1), mRNA
6885	17971	30528	0.68	7.0E-41	U72335.1	NT	Human platelet activating factor acetylhydrolase, brain isoform, 45 kDa subunit (LIS1) gene, exons 3 and 4
11411	24080	37300	2.23	7.0E-41	4758445	NT	Homo sapiens guanine nucleotide binding protein 10 (GNG10) mRNA
11631	24228	37552	1.73	7.0E-41	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
12782	25271		4.35	7.0E-41	11417972	NT	Homo sapiens peccadillo (zebrafish) homolog 1, containing BRCT domain (PES1), mRNA
274	13081	25724	1.19	6.0E-41	AB037163.1	NT	Homo sapiens DSCR5b mRNA, complete cds
2104	14835	27669	2.04	6.0E-41	7657042	NT	Homo sapiens Down syndrome candidate region 1 (DSR1), mRNA
4433	17189	29797	0.91	6.0E-41	BE567818.1	EST_HUMAN	601340485F1 NIH_MGC_63 Homo sapiens cDNA clone IMAGE:3682877 5'
7871	20596	33602	1.44	6.0E-41	BF513783.1	EST_HUMAN	UIH-BW1-emp-b-03-O-JL.s1 NCL CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3070421 3'
1785	14535	27244	1.11	6.0E-41	T62628.1	EST_HUMAN	yc03e10.s1 Stratagene lung (#837210) Homo sapiens cDNA clone IMAGE:79628 3'
4087	16830		1.07	5.0E-41	4885038	NT	Homo sapiens target of myb1 (chicken) homolog (TOM1), mRNA
6452	19220		2.29	5.0E-41	BE067042.1	EST_HUMAN	PM4-BT0341-251199-002-F11 BT0341 Homo sapiens cDNA
382	13188		2.42	4.0E-41	BE156318.1	EST_HUMAN	QV0-HT0367-150200-114-g09 HT0367 Homo sapiens cDNA
1076	13834	28462	1.28	4.0E-41	AU118344.1	EST_HUMAN	AU118344 HEMBA1 Homo sapiens cDNA clone HEMBA1005583 5'
1388	14135	28810	15.51	4.0E-41	AI027117.1	EST_HUMAN	ow45e06.s1 Soares_parathyroid_tumor_NbHPA Homo sapiens cDNA clone IMAGE:1049794 3' similar to TR:000597 000597 CYTOCHROME C-LIKE POLYPEPTIDE; contains LTR5.b1 LTR5 repetitive element;
1388	14135	28811	15.51	4.0E-41	AI027117.1	EST_HUMAN	ow45e06.s1 Soares_parathyroid_tumor_NbHPA Homo sapiens cDNA clone IMAGE:1049794 3' similar to TR:000597 000597 CYTOCHROME C-LIKE POLYPEPTIDE; contains LTR5.b1 LTR5 repetitive element;
1403	14150	28830	1.88	4.0E-41	AB008681.1	NT	Homo sapiens gene for activin receptor type IIB, complete cds
1632	14378	27065	6.08	4.0E-41	AI600406.1	EST_HUMAN	trf8c04.x1 NCL CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2165958 3' similar to contains OFR.b1 OFR repetitive element;
2891	15958	28302	3.55	4.0E-41	AJ228041.1	NT	Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22; segment 1/3
2891	15958	28303	3.55	4.0E-41	AJ228041.1	NT	Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22; segment 1/3
4124	16866	29493	2.24	4.0E-41	X92885.1	NT	H. sapiens DNase I hypersensitive site (HSS-3) enhancer element

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6416	19184		1.41	4.0E-41	AV758295.1	EST_HUMAN	AV758295 BM Homo sapiens cDNA clone BMFBHC06 5'
8593	22246	35430	7.24	4.0E-41	BF930483.1	EST_HUMAN	801888038F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4122119 5'
11671	24266		11.07	4.0E-41	AV710480.1	EST_HUMAN	AV710480 Cu Homo sapiens cDNA clone CUAACC07 5'
12546	25184		1.63	4.0E-41	AV708431.1	EST_HUMAN	AV708431 ADC Homo sapiens cDNA clone ADCARE02 5'
12727	24998	30971	1.69	4.0E-41	BE897118.1	EST_HUMAN	801608315F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3910059 5'
927	13694	26358	2.68	3.0E-41	AB030176.1	NT	Homo sapiens PAD-H19 mRNA for peptidylarginine deiminase type II, complete cds
4301	17040	28687	2.46	3.0E-41	AB026898.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
5404	18204	30908	7.78	3.0E-41	X87689.1	NT	H. sapiens mRNA for putative p64 OLCP protein
5288	19081	32043	1.59	3.0E-41	AB037808.1	NT	Homo sapiens mRNA for KIAA1397 protein, partial cds
7159	19648	32916	0.71	3.0E-41	AA356188.1	EST_HUMAN	EST64683 Jurkat T-cells VI Homo sapiens cDNA 5' and
11730	24323	37647	1.26	3.0E-41	AJ229041.1	NT	Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22; segment 1/3
11924	24485		1.52	3.0E-41	AA609788.1	EST_HUMAN	af1710.51 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1031947 3'
12456	24825		1.48	3.0E-41	BF125922.1	EST_HUMAN	801762940F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:4028081 5'
1817	14299	26987	6.17	2.0E-41	U43701.1	NT	Human ribosomal protein L23a mRNA, complete cds
1951	14988	27309	1.84	2.0E-41	AA331940.1	EST_HUMAN	EST35818 Embryo, 8 week I Homo sapiens cDNA 5' end
2216	14944	27684	1.54	2.0E-41	D86962.1	NT	Human mRNA for KIAA0207 gene, complete cds
2264	14990	27730	3.94	2.0E-41	X89631.1	NT	G.gorilla DNA for ZNF80 gene homolog
2831	14299	26987	4.65	2.0E-41	U43701.1	NT	Human ribosomal protein L23a mRNA, complete cds
3321	16081	28731	1.41	2.0E-41	AA449549.1	EST_HUMAN	Z03804.1 Soares_testis_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:785839 5'
4579	17314	28942	1.17	2.0E-41	AL163267.2	NT	Homo sapiens chromosome 21 segment HS21C067
4579	17314	28943	1.17	2.0E-41	AL163267.2	NT	Homo sapiens chromosome 21 segment HS21C067
5141	17659	30475	0.9	2.0E-41	AW236547.1	EST_HUMAN	hm47706.x1 NCI_CGAP_GC8 Homo sapiens cDNA clone IMAGE:2687363 3' similar to TR:070843 070343
6530	19208	32300	0.76	2.0E-41	4504778	NT	PPAR GAMMA COACTIVATOR 1.:
7572	20241	33346	8.08	2.0E-41	AF038404.1	NT	Homo sapiens Integrin, beta 8 (ITGB8) mRNA
7867	20662	33786	1.45	2.0E-41	M6844.1	NT	Homo sapiens homolog of Nedd5 (Nedd5) mRNA, complete cds
7867	20662	33787	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33788	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33789	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33790	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33791	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33792	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33793	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33794	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33795	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33796	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33797	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33798	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33799	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33800	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33801	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33802	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33803	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33804	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33805	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33806	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33807	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33808	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33809	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33810	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33811	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33812	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33813	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33814	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33815	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33816	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33817	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33818	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33819	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33820	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33821	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33822	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33823	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33824	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33825	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33826	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33827	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33828	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33829	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33830	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33831	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33832	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33833	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33834	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33835	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33836	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33837	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33838	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33839	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33840	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33841	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33842	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33843	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33844	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33845	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33846	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33847	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33848	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33849	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33850	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33851	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33852	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33853	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33854	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33855	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33856	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33857	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33858	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33859	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33860	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33861	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33862	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33863	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33864	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33865	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33866	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33867	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33868	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33869	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33870	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33871	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33872	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33873	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33874	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33875	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33876	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33877	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33878	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33879	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33880	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33881	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33882	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33883	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33884	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33885	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33886	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33887	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33888	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
7867	20662	33889	1.45	2.0E-41	M6844.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3201	15084	28617	1.05	1.0E-41	BE869735.1	EST_HUMAN	601445847F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3848803 5'
4529	17284	29897	14.08	1.0E-41	6878468	NT	Mus musculus tubulin alpha 6 (Tub6), mRNA
6749	17918	30582	0.86	1.0E-41	H99079.1	EST_HUMAN	yc18b03.a1 Soares melanocyte ZN1b-HM Homo sapiens cDNA clone IMAGE:262061 3'
9318	21985	35157	1.99	1.0E-41	A1217868.1	EST_HUMAN	qf75c10.x1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1755868 3'
11111	23781	37056	1.86	1.0E-41	AW847812.1	EST_HUMAN	IL3-CT0213-190200-040-F09 CT0213 Homo sapiens cDNA
12054	24571		2.81	1.0E-41	11528291	NT	Homo sapiens hypothetical protein FLJ20454 (FLJ20454), mRNA
8418	21111		1.14	9.0E-42	BE178191.1	EST_HUMAN	RCO-HT0613-210300-032-q01 HT0613 Homo sapiens cDNA
9072	21761	34922	3.49	9.0E-42	11590151	NT	Homo sapiens hypothetical C2H2 zinc finger protein FLJ22504 (FLJ22504), mRNA
9072	21761	34923	3.49	9.0E-42	11590151	NT	Homo sapiens hypothetical C2H2 zinc finger protein FLJ22504 (FLJ22504), mRNA
450	13236	25875	7.71	8.0E-42	AF003530.1	NT	Homo sapiens homeobox protein CDX4 (CDX4) gene, complete cds and flanking repeat regions
2102	14833	27567	0.92	8.0E-42	AB026898.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
12083	26277		4.4	8.0E-42	AA493898.1	EST_HUMAN	h07c02.s1 NCL_CGAP_Thy1 Homo sapiens cDNA clone IMAGE:943586 similar to TR:G434304 G434304 387BP EXPRESSED SEQUENCE TAG MRNA
12111	25154		1.56	8.0E-42	AW088062.1	EST_HUMAN	xc97a04.x1 NCL_CGAP_Bm35 Homo sapiens cDNA clone IMAGE:2592174 3' similar to contains OFR.12
911	13878		2.58	7.0E-42	AL163285.2	NT	OFR repetitive element;
9143	21874	35039	1.57	7.0E-42	AU204358.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C085
11126	23785	37071	1.3	7.0E-42	AA589582.1	EST_HUMAN	qf89g12.x1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1754278 3'
11128	23795	37072	1.3	7.0E-42	AA589592.1	EST_HUMAN	nf23g07.s1 NCL_CGAP_Pt1 Homo sapiens cDNA clone IMAGE:914662
1848	14589	27298	3.21	6.0E-42	AF012872.1	NT	nf23g07.s1 NCL_CGAP_Pt1 Homo sapiens cDNA clone IMAGE:914652
1848	14589	27300	3.21	6.0E-42	AF012872.1	NT	Homo sapiens phosphatidylinositol 4-kinase 230 (p4K230) mRNA, complete cds
2287	15012		3.55	6.0E-42	AW238858.1	EST_HUMAN	Homo sapiens phosphatidylinositol 4-kinase 230 (p4K230) mRNA, complete cds
5381	18181	30871	1.03	6.0E-42	AB028990.1	NT	xp29f08.x1 NCL_CGAP_HN10 Homo sapiens cDNA clone IMAGE:2741799 3' similar to contains L1.t1 L1
5930	18181	30871	1.45	6.0E-42	AB028990.1	NT	repetitive element;
132	12947		7.53	5.0E-42	AJ271735.1	NT	Homo sapiens mRNA for KIAA1067 protein, partial cds
428	13214	25859	1.41	5.0E-42	BE217913.1	EST_HUMAN	Homo sapiens mRNA for KIAA1067 protein, partial cds
474	13280		2.57	5.0E-42	5730038	NT	Homo sapiens Xa pseudocautosomal region; segment 1/2
475	13281		2.74	5.0E-42	5730038	NT	h031e11.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3175052 3'
6587	18350	32363	1.04	5.0E-42	11433063	NT	Homo sapiens SET domain and methyltransferase fusion gene (SETMAR) mRNA
6587	18350	32363	1.04	5.0E-42	11433063	NT	Homo sapiens SET domain and methyltransferase fusion gene (SETMAR) mRNA
6587	18350	32363	1.04	5.0E-42	11433063	NT	Homo sapiens ubiquitin protein ligase E3A (human papilloma virus E6-associated protein, Angelman syndrome) (UBES3A), mRNA
6587	18350	32364	1.04	5.0E-42	11433063	NT	Homo sapiens ubiquitin protein ligase E3A (human papilloma virus E6-associated protein, Angelman syndrome) (UBES3A), mRNA

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6704	19819	32862	3.12	5.0E-42	11417957	NT	Homo sapiens myotubularin related protein 3 (MTMR3), mRNA
7101	19789	32854	1.59	5.0E-42	AF071599.1	NT	Homo sapiens multifunctional calcium/calmodulin-dependent protein kinase II delta2 isoform mRNA, complete cds
7711	20375	33489	0.57	5.0E-42	4826977	NT	Homo sapiens reelin (RELN) mRNA
8677	21369	34515	3.55	5.0E-42	AB037715.1	NT	Homo sapiens mRNA for KIAA1284 protein, partial cds
10820	23600	36849	2.44	5.0E-42	8823162	NT	Homo sapiens hypothetical protein FLJ20163 (FLJ20163), mRNA
736	13510	26167	5.09	4.0E-42	AF055066.1	NT	Homo sapiens MHC class 1 region
736	13510	26168	5.09	4.0E-42	AF055068.1	NT	Homo sapiens MHC class 1 region
1044	13803	26462	3.46	4.0E-42	AF189011.1	NT	Homo sapiens ribonuclease III (RN3) mRNA, complete cds
4171	16911	29541	1.22	4.0E-42	X59417.1	NT	H. sapiens PROS-27 mRNA
4202	16943	29570	1.07	4.0E-42	AF246219.1	NT	Homo sapiens SNARE protein kinase SNAK mRNA, complete cds
4223	16984	29589	4.15	4.0E-42	4508498	NT	Homo sapiens regulatory factor X, 4 (influences HLA class II expression) (RFX4) mRNA
4543	17278	29609	15.12	4.0E-42	4508008	NT	Homo sapiens zinc finger protein 177 (ZNF177) mRNA
10646	23241	36475	1.56	4.0E-42	AW818630.1	EST_HUMAN	RC1-ST0278-040400-018-h11 ST0278 Homo sapiens cDNA
10545	23241	36478	1.66	4.0E-42	AW818630.1	EST_HUMAN	RC1-ST0278-040400-018-h11 ST0278 Homo sapiens cDNA
11389	23985	37297	1.5	4.0E-42	BF035327.1	EST_HUMAN	601468631F1 NIH_JMGC_60 Homo sapiens cDNA clone IMAGE:3862086 5'
1498	14213	26902	2.81	2.0E-42	BF378634.1	EST_HUMAN	RC3-TN0078-110900-024-g07 TN0078 Homo sapiens cDNA
2413	15134		2.92	2.0E-42	AW896344.1	EST_HUMAN	RC3-TN0078-270400-011-h10 NN0078 Homo sapiens cDNA
2425	15146	27879	2.22	2.0E-42	AW250059.1	EST_HUMAN	2819283.3prime NIH_JMGC_7 Homo sapiens cDNA clone IMAGE:2819283 3'
5670	18465	31379	7.8	2.0E-42	AW955388.1	EST_HUMAN	EST387438 MAGE resequences, MAGE Homo sapiens cDNA
5670	18465	31380	7.8	2.0E-42	AW955388.1	EST_HUMAN	EST387438 MAGE resequences, MAGE Homo sapiens cDNA
6654	19419	32428	1.46	2.0E-42	A052596.1	EST_HUMAN	ow83605.x1 Soares_fetal_liver_spleen_1NLS_S1 Homo sapiens cDNA clone IMAGE:1663417 3'
9741	22302	35598	1.32	2.0E-42	BE386919.1	EST_HUMAN	601061284F1 NIH_JMGC_10 Homo sapiens cDNA clone IMAGE:3447620 5'
9955	22603	35807	0.88	2.0E-42	P81649	SWISSPROT	RIBONUCLEASE K3 (RNASE K3)
9955	22603	35808	0.88	2.0E-42	P81649	SWISSPROT	RIBONUCLEASE K3 (RNASE K3)
11742	24334	37860	1.37	2.0E-42	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
717	13480	28143	1.21	1.0E-42	X57147.1	NT	Human endogenous retrovirus pHE.1 (ERV9)
1019	13778	26441	1.1	1.0E-42	AW295909.1	EST_HUMAN	UJH-B11-wih-e-Q-UJ.1 NCI CGAP Sub3 Homo sapiens cDNA clone IMAGE:2721871 3'
1079	13837	28495	1.18	1.0E-42	AJ251818.1	NT	Homo sapiens partial C9 gene for complement component C9, exon 1
1079	13837	28498	1.18	1.0E-42	AJ251818.1	NT	Homo sapiens partial C9 gene for complement component C9, exon 1
1220	15583	28841	16.49	1.0E-42	AF067166.1	NT	Homo sapiens NADH-ubiquinone oxidoreductase AGGG subunit precursor homolog mRNA, nuclear gene encoding mitochondrial protein, complete cds
1220	15583	28842	16.49	1.0E-42	AF067166.1	NT	Homo sapiens NADH-ubiquinone oxidoreductase AGGG subunit precursor homolog mRNA, nuclear gene encoding mitochondrial protein, complete cds

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1696	14439	27137	1.13	1.0E-42	11423218	NT	Homo sapiens rec (LOC61201), mRNA
2546	15281	27998	1.63	1.0E-42	5174458	NT	Homo sapiens major histocompatibility complex, class II, DM alpha (HLA-DMA) mRNA
2964	15730	28380	10.26	1.0E-42	4505524	NT	Homo sapiens origin recognition complex, subunit 5 (yeast homolog)-like (ORC5L) mRNA, and translated products
3695	16449	28088	2.6	1.0E-42	7662027	NT	Homo sapiens KIAA0255 gene product (KIAA0255), mRNA
3905	16655	29298	1.17	1.0E-42	AL163287.2	NT	Homo sapiens chromosome 21 segment HS21C087
4221	16962	29387	1.92	1.0E-42	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
4554	17289	29918	0.75	1.0E-42	AW813617.1	EST_HUMAN	RC3-ST0197-161099-012-e03 ST0197 Homo sapiens cDNA
4697	17431	30082	1.88	1.0E-42	5803122	NT	Homo sapiens proteasome inhibitor (PI31), mRNA
4697	17431	30063	1.88	1.0E-42	5803122	NT	Homo sapiens proteasome inhibitor (PI31), mRNA
4728	17480	30097	6.02	1.0E-42	4506758	NT	Homo sapiens ryandine receptor 3 (RYR3) mRNA
5044	17763	30378	1.08	1.0E-42	4501912	NT	Homo sapiens a disintegrin and metalloproteinase domain 23 (ADAM23) mRNA
5044	17763	30378	1.08	1.0E-42	4501912	NT	Homo sapiens a disintegrin and metalloproteinase domain 23 (ADAM23) mRNA
9888	22834	35344	4.03	9.0E-43	4757969	NT	Homo sapiens chromodomain protein, Y chromosome-like (COYL) mRNA
637	13416	26052	19.69	8.0E-43	AV736824.1	EST_HUMAN	AV736824 CB Homo sapiens cDNA clone CBLAKH08 5'
637	13416	26053	19.69	8.0E-43	AV736824.1	EST_HUMAN	AV736824 CB Homo sapiens cDNA clone CBLAKH08 5'
684	13459	26104	6.03	8.0E-43	8923276	NT	Homo sapiens hypothetical protein FLJ20297 (FLJ20297), mRNA
684	13459	26105	6.03	8.0E-43	8923276	NT	Homo sapiens hypothetical protein FLJ20297 (FLJ20297), mRNA
684	13459	26106	6.03	8.0E-43	8923276	NT	Homo sapiens hypothetical protein FLJ20297 (FLJ20297), mRNA
5812	18408	31321	0.76	8.0E-43	H13952.1	EST_HUMAN	Y08511.1 Soares placenta Nb21P Homo sapiens cDNA clone IMAGE:148172 5'
3832	16385	28025	6.42	7.0E-43	AW246442.1	EST_HUMAN	2822251.5ptme NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2822251 5'
8667	21359		4.09	7.0E-43	A1936748.1	EST_HUMAN	wp6601.x1 NCI_CGAP_Bn25 Homo sapiens cDNA clone IMAGE:2466885 3' similar to TR:O15475
							O15475 UNNAMED HERV-H PROTEIN; contains LTR7.b1 LTR7 repetitive element;
1321	14070		10.45	8.0E-43	AA491890.1	EST_HUMAN	ne72d06.x1 NCI_CGAP_Ew1 Homo sapiens cDNA clone IMAGE:309803 similar to gb:U05095 80S
2800	15314		2.25	6.0E-43	AV708201.1	EST_HUMAN	RIBOSOMAL PROTEIN L30 (HUMAN);
6219	18983	31969	2.24	8.0E-43	9955973	NT	AV708201 ADC Homo sapiens cDNA clone ADGACC10 5'
							Homo sapiens ATP-binding cassette, sub-family C (CFTR/MRP), member 3 (ABCC3), transcript variant MRP3B, mRNA
6808	19469	32492	2.09	8.0E-43	AW498997.1	EST_HUMAN	hd50b04.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2910901 3' similar to contains
							MER1.33 MER1 MER1 repetitive element;
9751	22402	35007	2.16	8.0E-43	AA195154.1	EST_HUMAN	z35a06.t1 Soares NIH-MP1 S1 Homo sapiens cDNA clone IMAGE:065410 5' similar to TR:G529841
11044	23714		2.55	6.0E-43	AL119158.1	EST_HUMAN	G529841 DB1, COMPLETE CDS; contains element PTR7 repetitive element;
138	12963		2.64	5.0E-43	AL163213.2	NT	DKFZ761L1712.1 761 (synonym: hamy2) Homo sapiens cDNA clone DKFZp761L1712 5'
							Homo sapiens chromosome 21 segment HS21C013

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Description
490	13275	25908	4.55	5.0E-43	AA382780.1	EST_HUMAN	EST186033 Testis (Homo sapiens cDNA 5' end)
2860	15618	28264	1.52	5.0E-43	AV732578.1	EST_HUMAN	AV732578 HTF Homo sapiens cDNA clone HTFANC06 5'
6213	19463	32484	1.17	5.0E-43	AI613509.1	EST_HUMAN	W22607.x1 NCI_CGAP_Bm52 Homo sapiens cDNA clone IMAGE:2260452 3'
6802	19463	32484	0.72	5.0E-43	AI613509.1	EST_HUMAN	W22607.x1 NCI_CGAP_Bm52 Homo sapiens cDNA clone IMAGE:2260452 3'
8778	21470		0.46	5.0E-43	HT4277.1	EST_HUMAN	W49012.1 Sources fetal liver spleen 1N1LS Homo sapiens cDNA clone IMAGE:229510 5'
9248	21927	35088	0.47	5.0E-43	AA044450.1	EST_HUMAN	Z65502.1 Sources pregnant uterus NibHPU Homo sapiens cDNA clone IMAGE:486898 5' similar to gb:D28805 N-ACETYLACTOSAMINE SYNTHASE (HUMAN);
9248	21927	35089	0.47	5.0E-43	AA044450.1	EST_HUMAN	Z65502.1 Sources pregnant uterus NibHPU Homo sapiens cDNA clone IMAGE:486898 5' similar to gb:D28805 N-ACETYLACTOSAMINE SYNTHASE (HUMAN);
9264	22018	35188	4.44	5.0E-43	AA465288.1	EST_HUMAN	ea33d08.1 NCI_CGAP_G0B1 Homo sapiens cDNA clone IMAGE:815055 5'
10287	22944	36158	2.31	5.0E-43	AT933244.1	EST_HUMAN	oa52c10.x5 NCI_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:166810 3' similar to TR:P90561 P90591 PV14 cDNA;
10335	22962	36201	1.21	5.0E-43	AL049110.1	EST_HUMAN	DKFZp434D0119.1 J34 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434D0119
10863	23354	36563	5.29	5.0E-43	AW803007.1	EST_HUMAN	MR2-SN0007-290400-004-c02 SN0007 Homo sapiens cDNA
10891	23571	36822	1.84	5.0E-43	W20111.1	EST_HUMAN	5544 Human retina cDNA randomly primed subcloned Homo sapiens cDNA
952	15519	26383	5.9	4.0E-43	AF003528.1	NT	Homo sapiens X-linked arylidic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
6178	17987	30502	1.02	4.0E-43	AI056338.1	EST_HUMAN	oy47n03.x1 NCI_CGAP_Bm23 Homo sapiens cDNA clone IMAGE:1668013 3'
6276	19049	32026	0.7	4.0E-43	6898009	NT	Homo sapiens glycyl-RNA synthetase (GARS), mRNA
7030	18722		2.32	4.0E-43	11416783	NT	Homo sapiens protodactin beta 6 (PCDH6), mRNA
8077	20771	33900	5.21	4.0E-43	AI244341.1	EST_HUMAN	qj76a02.x1 NCI_CGAP_Kd3 Homo sapiens cDNA clone IMAGE:1865354 3' similar to contains MER10.13
8077	20771	33901	5.21	4.0E-43	AI244341.1	EST_HUMAN	MER10 repetitive element;
10213	22861	36074	1.23	4.0E-43	6005687	NT	qj76a02.x1 NCI_CGAP_Kd3 Homo sapiens cDNA clone IMAGE:1865354 3' similar to contains MER10.13
11275	23636	37228	1.68	4.0E-43	IT7390.1	EST_HUMAN	MER10 repetitive element;
12030	24556		3.05	4.0E-43	R20950.1	EST_HUMAN	qj76a02.x1 NCI_CGAP_Kd3 Homo sapiens cDNA clone IMAGE:1865354 3' similar to contains MER10.13
1191	13943		4.59	3.0E-43	AF223391.1	NT	Homo sapiens zinc finger protein 161 (ZNF161), mRNA
1690	14434	27130	2.07	3.0E-43	X07899.1	NT	y072h10.1 Sources fetal liver spleen 1N1LS Homo sapiens cDNA clone IMAGE:113827 5'
3558	18313	28960	1.31	3.0E-43	S89002.1	NT	y06b05.1 Sources infant brain 1N1B Homo sapiens cDNA clone IMAGE:31363 5' similar to contains MER10 repetitive element;
4268	18999	29829	1.04	3.0E-43	AA548154.1	EST_HUMAN	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
							H sapiens gene encoding La autoantigen
							AML1-EVI-1=AML1-EVI-1 fusion protein (rearranged translocation) [human, leukemic cell line SKH1, mRNA Mutant, 5938 nt]
							nk55c06.s1 NCI_CGAP_P17 Homo sapiens cDNA clone IMAGE:1017419

Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5803	18593	31518	0.72	3.0E-43	D34613.1	NT	Human TBXAS1 gene for thromboxane synthase, promoter region and exon 1
6294	19038	32013	2.24	3.0E-43	7305360	NT	Mus musculus clogelin (Clog), mRNA
6294	19038	32014	2.24	3.0E-43	7305360	NT	Mus musculus clogelin (Clog), mRNA
6628	19390	32404	4.29	3.0E-43	U65487.1	NT	Human ribosomal RNA upstream binding transcription factor (UBTF) gene, partial cds
8063	20757		8.38	3.0E-43	AA458824.1	EST_HUMAN	aa88f11.1 Stratagene fetal refina 837202 Homo sapiens cDNA clone IMAGE:838413 3' similar to contains
8719	21411	34554	1.87	3.0E-43	7661721	NT	THR12 THR repetitive element;
9764	22415	35622	0.56	3.0E-43	11420217	NT	Homo sapiens hypothetical protein (HSA011916), mRNA
179	12991		7.67	2.0E-43	A190704.1	EST_HUMAN	Homo sapiens similar to uracilase carboxyltransferase (H. sapiens) (LOC63646), mRNA
6383	19152	32151	1.13	2.0E-43	BE222778.1	EST_HUMAN	q681c09.x1 Soares_festis_NHT: Homo sapiens cDNA clone IMAGE:1733968 3' similar to contains P TR7.13
6383	19152	32152	1.13	2.0E-43	BE222778.1	EST_HUMAN	PTR7 PTR7 repetitive element;
7176	19862	32933	1.32	2.0E-43	AW207390.1	EST_HUMAN	HL3a09.x1 NCI_CGAP_Bm41 Homo sapiens cDNA clone IMAGE:3173750 3' similar to contains element
8207	20901		5.59	2.0E-43	U43701.1	NT	MER40 repetitive element;
11156	23823		4.94	2.0E-43	T03007.1	EST_HUMAN	HL3a08.x1 NCI_CGAP_Bm41 Homo sapiens cDNA clone IMAGE:3173750 3' similar to contains element
1645	14391	27080	2.94	1.0E-43	AF154836.1	NT	MER40 repetitive element;
1645	14391	27081	2.94	1.0E-43	AF154836.1	NT	UHH-B11-af-a-09-0-UJ.1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2721712 3'
1700	14443	27142	1.57	1.0E-43	AL163284.2	NT	Human ribosomal protein L23a mRNA, complete cds
2727	15434	28170	3.86	1.0E-43	BF348283.1	EST_HUMAN	FB1G5 Fetal brain, Stratiogene Homo sapiens cDNA clone FB1G5 3'end similar to LINE-1
5325	18128	30788	0.74	1.0E-43	4885544	NT	Homo sapiens Ras-like GTP-binding protein (RAB27A) gene, exons 1b and 2
6514	19279	32280	8.45	1.0E-43	4507168	NT	Homo sapiens Ras-like GTP-binding protein (RAB27A) gene, exons 1b and 2
6514	19279	32281	8.45	1.0E-43	4507168	NT	Homo sapiens chromosome 21 segment HS21C084
6870	17947	30542	1.36	1.0E-43	R19751.1	EST_HUMAN	602022313F1 NCI_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4157888 5'
7833	20528	33655	1.13	1.0E-43	AF175285.1	NT	Homo sapiens pyruvate dehydrogenase kinase, isoenzyme 3 (PDK3) mRNA
7865	20660		4.03	1.0E-43	AF198490.1	NT	Homo sapiens Sp4 transcription factor (SP4) mRNA
8736	21428	34574	25.49	1.0E-43	AW963676.1	EST_HUMAN	Homo sapiens Sp4 transcription factor (SP4) mRNA
10188	22837	36052	0.66	1.0E-43	AW963229.1	EST_HUMAN	yg40e01.1 Soares Infant brain 1N1B Homo sapiens cDNA clone IMAGE:34732 5' similar to
10854	23584	36812	6.11	1.0E-43	A1984961.1	EST_HUMAN	SP-BD38_MOUSE P28666 BRAIN PROTEIN DN38 ;
11338	24028	37332	4.78	1.0E-43	11424378	NT	Homo sapiens vacuolar sorting protein 35 (VPS35) mRNA, complete cds
11975	24520		3.04	1.0E-43	AL137984.1	EST_HUMAN	Homo sapiens Bg22.1 region and MTG8 (GBFA2T1) gene, partial cds
12253	24699	31079	1.89	1.0E-43	A1675416.1	EST_HUMAN	EST75740 IMAGE resequences, MAGH Homo sapiens cDNA
							EST756298 IMAGE resequences, MAGB Homo sapiens cDNA
							w187h01.x1 NCI_CGAP_Kd11 Homo sapiens cDNA clone IMAGE:2494705 3'
							Homo sapiens calcium channel, voltage-dependent, alpha 1E subunit (CACNA1E), mRNA
							DKFZp761D1015.1 761 (synonym: ham2) Homo sapiens cDNA clone DKFZp761D1015 5'
							w188h04.x1 NCI_CGAP_PT28 Homo sapiens cDNA clone IMAGE:2313776 3'

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12469	24835	31032	3.41	8.0E-44	11418322	NT	Homo sapiens cadherin EGF LAG seven-pass G-type receptor 1 (CELSR1), mRNA
870	13639	26309	6.23	8.0E-44	A1222885.1	EST_HUMAN	ch23g01.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1845552 3'
870	13639	26310	6.23	8.0E-44	A1222885.1	EST_HUMAN	ch23g01.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1845552 3'
8437	21129	34266	2.67	8.0E-44	X94354.1	NT	H. sapiens DNA for Corne cGMP-PDE gene
10236	22884	36097	0.47	8.0E-44	11423497	NT	Homo sapiens small proline-rich protein 2C (SPRR2C), mRNA
10236	22884	36098	0.47	8.0E-44	11423497	NT	Homo sapiens small proline-rich protein 2C (SPRR2C), mRNA
11117	23787	37064	3.78	8.0E-44	Y10488.2	NT	Homo sapiens mRNA for thymidine kinase, partial
11688	24283	37808	1.36	8.0E-44	L29139.1	NT	Homo sapiens myosin mRNA, partial cds
12207	24673	31073	4.09	8.0E-44	11527389	NT	Homo sapiens polymerase (RNA) II (DNA directed) polypeptide F (POLR2F), mRNA
12248	25009	30976	1.38	8.0E-44	11418088	NT	Homo sapiens putative nuclear protein (HRIHFB2122), mRNA
12589	25186	30808	2.55	8.0E-44	11418089	NT	Homo sapiens protein kinase C, alpha binding protein (PRKCABP), mRNA
644	13423		0.69	7.0E-44	R06035.1	EST_HUMAN	ye88d01.r1 Soares fetal liver spleen 1N1LS Homo sapiens cDNA clone IMAGE:124920 5'
2228	14956	27696	1.05	7.0E-44	5031898	NT	Homo sapiens LIM domain-containing preferred translocation partner in lipoma (LPP) mRNA
2866	15732	28381	2.58	7.0E-44	AF048729.1	NT	Homo sapiens minisatellite ms32 repeat region
2866	15732	28382	2.58	7.0E-44	AF048729.1	NT	Homo sapiens minisatellite ms32 repeat region
3843	16584	29231	2.54	7.0E-44	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
4217	16958	29581	1.12	7.0E-44	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
4217	16958	29582	1.12	7.0E-44	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
5142	17860	30478	1.01	7.0E-44	4505046	NT	Homo sapiens propionin convertase subtilisin/kexin type 2 (PCSK2) mRNA
8085	20779	33008	2.28	7.0E-44	AU159839.1	EST_HUMAN	AU159839 Y78AA1 Homo sapiens cDNA clone Y78AA1000466 3'
6012	18793	31756	0.94	6.0E-44	Z20946.1	EST_HUMAN	HSAAADEYU P, Human fetal Brain Whole tissue Homo sapiens cDNA
11781	24372	37702	1.78	6.0E-44	AW954050.1	EST_HUMAN	EST368120 MAGE resequences, MAGC Homo sapiens cDNA
298	13102		3.3	5.0E-44	AJ288880.1	NT	Homo sapiens KIAA0851 gene (partial), X13 gene and LZTFL1 gene
323	13124		2.72	5.0E-44	AJ288880.1	NT	Homo sapiens KIAA0851 gene (partial), X13 gene and LZTFL1 gene
7788	20493	33607	4.98	5.0E-44	A1568523.1	EST_HUMAN	tr40d02.x1 NCL_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2170083 3' similar to contains OFR.1
8284	22038		2.34	5.0E-44	AU124571.1	EST_HUMAN	OFR OFR repetitive element;
3408	16167	28816	3.75	4.0E-44	AL163303.2	NT	AU124571 NT2RM4 Homo sapiens cDNA clone NT2RM4000218 5'
7370	20050	33131	0.68	4.0E-44	BE883178.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C103
8169	20863	33995	0.78	4.0E-44	L21948.1	NT	601508601F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3910152 5'
8777	21469		0.61	4.0E-44	BE179818.1	EST_HUMAN	Human fibrillin (FBN1) locus polymorphism
11202	23806	37153	5.38	4.0E-44	U90878.1	NT	RC3-H10585-010400-023-008 HT0585 Homo sapiens cDNA
3094	15859	28500	5.77	3.0E-44	AA169851.1	EST_HUMAN	Homo sapiens carboxyl terminal LIM domain protein (CLIM1) mRNA, complete cds
							zp18b05.r1 Stratagene fetal retina 607202 Homo sapiens cDNA clone IMAGE:609777 5'



Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3870	16620	29260	1.37	3.0E-44	AA337234.1	EST_HUMAN	EST42299 Endometrial tumor Homo sapiens cDNA 5' end similar to alpha-1-antitrypsinase F
9419	22097	35269	0.55	3.0E-44	AF005273.1	NT	Sus scrofa domestica submandibular epimucosa mRNA, complete cds
1027	13787	28446	2.84	2.0E-44	4826685	NT	Homo sapiens DEAD/1 (Asp-Glu-Ala-Asp/His) box polypeptide 1 (DDX1) mRNA
1027	13787	28447	2.84	2.0E-44	4826685	NT	Homo sapiens DEAD/1 (Asp-Glu-Ala-Asp/His) box polypeptide 1 (DDX1) mRNA
1185	13937	26602	3.38	2.0E-44	5803200	NT	Homo sapiens transmembrane trafficking protein (TMP21), mRNA
1185	13937	26603	3.38	2.0E-44	5803200	NT	Homo sapiens transmembrane trafficking protein (TMP21), mRNA
1289	14038	26711	4.06	2.0E-44	AF133588.1	NT	Homo sapiens RAB38 (RAB38) mRNA, complete cds
1347	14095	26770	1.3	2.0E-44	BE46525.1	EST_HUMAN	hw14g06.x1 NCI_CGAP_L124 Homo sapiens cDNA clone IMAGE:318238 3' similar to SW:OXYB_HUMAN
2147	14877	27612	2.22	2.0E-44	AF070651.1	NT	P22069 OXYSTEROL-BINDING PROTEIN, ;
2616	15327	28873	1.31	2.0E-44	5801833	NT	Homo sapiens tissue-type bone marrow zinc finger protein 4 mRNA, complete cds
3463	16219	28873	1.13	2.0E-44	DB7676.1	NT	Homo sapiens adaptor-related protein complex 4, sigma 1 subunit (GLAPSA), mRNA
4531	17286	29899	1.54	2.0E-44	AW864379.1	EST_HUMAN	Homo sapiens DNA for amyloid precursor protein, complete cds
6004	18785	31747	1.87	2.0E-44	11449901	NT	PM4-SN0016-120500-003-004 SN0016 Homo sapiens cDNA
6758	17927	30562	3.31	2.0E-44	AF038968.1	NT	Homo sapiens chemokine (C-C motif) receptor 9 (CCR9), mRNA
7313	19996	33074	4.57	2.0E-44	11419228	NT	Homo sapiens general transcription factor 2-1 (GTF2I) mRNA, alternatively spliced product, complete cds
7313	19996	33075	4.57	2.0E-44	11419228	NT	Homo sapiens glutamate receptor, metabotropic 3 (GRM3), mRNA
8327	21020	34155	0.67	2.0E-44	7706370	NT	Homo sapiens glutamate receptor, metabotropic 3 (GRM3), mRNA
8327	21020	34156	0.67	2.0E-44	7706370	NT	Homo sapiens vesicle transport-related protein (KIAA0917), mRNA
8517	21209	34352	1.58	2.0E-44	BE889058.1	EST_HUMAN	Homo sapiens vesicle transport-related protein (KIAA0917), mRNA
11883	24456		1.62	2.0E-44	BE244902.1	EST_HUMAN	60128691.4F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3613588 5'
12760	25020		1.4	2.0E-44	11528283	NT	TCBAP1E2795 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project-TCBA Homo sapiens cDNA clone TCBAP2795
51	12880	25507	2.43	1.0E-44	7657334	NT	Homo sapiens cat eye syndrome chromosome region, candidate 1 (CECR1), mRNA
51	12880	25508	2.43	1.0E-44	7657334	NT	Homo sapiens Mishaap/NIK-related kinase (MINK), mRNA
566	13347	25075	2.44	1.0E-44	AW853132.1	EST_HUMAN	Homo sapiens Mishaap/NIK-related kinase (MINK), mRNA
1175	13928		1.9	1.0E-44	AW984603.1	EST_HUMAN	RC1-CT0248-030300-028-h12 CT0248 Homo sapiens cDNA
1567	14314		5.78	1.0E-44	AL163303.2	NT	RC1-BN0039-110300-012-501 BN0039 Homo sapiens cDNA
2221	14949	27687	3.74	1.0E-44	AA434554.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C103
2221	14949	27688	3.74	1.0E-44	AA434554.1	EST_HUMAN	zwc53d02.1 Scores: total_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:773763 5' similar to contains THR.13 THR repetitive element ;
2221	14949	27688	3.74	1.0E-44	AA434554.1	EST_HUMAN	zwc53d02.1 Scores: total_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:773763 5' similar to contains THR.13 THR repetitive element ;

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2280	15590	27746	0.96	1.0E-44	AA398089.1	EST_HUMAN	z88g11.1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:728476 5'
2783	15488	28211	1.44	1.0E-44	AF198779.1	NT	Homo sapiens transcription factor IGHM enhancer 3, JM11 protein, JM4 protein, JM5 protein, T54 protein, JM10 protein, A4 differentiation-dependent protein, triple LIM domain protein 6, and synaptophysin genes, complete cds; and L-type calcium channel $\alpha$
3712	16485		3.73	1.0E-44	AA455889.1	EST_HUMAN	es01c08.s1 Soares_NHT-MP. S1 Homo sapiens cDNA clone IMAGE:811884 3'
5048	17767	30385	1.04	1.0E-44	AJ130755.1	NT	Homo sapiens alpha satellite DNA, M1 monomer type
5048	17767	30386	1.04	1.0E-44	AJ130755.1	NT	Homo sapiens alpha satellite DNA, M1 monomer type
8163	20857	33988	0.98	1.0E-44	AW967073.1	EST_HUMAN	EST370147 MAGE resequences, MAGJ Homo sapiens cDNA
8163	20857	33989	0.98	1.0E-44	AW967073.1	EST_HUMAN	EST379147 MAGE resequences, MAGJ Homo sapiens cDNA
8544	21236	34380	0.98	1.0E-44	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
8924	21615	34759	0.99	1.0E-44	A3337183.1	EST_HUMAN	gs88g07.x1 NCI_CGAP_G08 Homo sapiens cDNA clone IMAGE:20096028 3'
10936	23616		4.04	1.0E-44	AV714608.1	EST_HUMAN	AV714608 DCS Homo sapiens cDNA clone DCBBYE03 5'
11516	24116	37427	3.92	1.0E-44	10092884	NT	Homo sapiens Su(H) domain (SCR repeat) containing (BK85A8.2), mRNA
11563	24182	37498	3.17	1.0E-44	AW846987.1	EST_HUMAN	RC1-C70198-150999-011-C08 CT0198 Homo sapiens cDNA
11563	24182	37497	3.17	1.0E-44	AW846987.1	EST_HUMAN	RC1-C70198-150999-011-C08 CT0198 Homo sapiens cDNA
4639	17274	29606	1.38	9.0E-45	8922391	NT	Homo sapiens hypothetical protein FLJ10379 (FLJ10379), mRNA
4639	17274	29607	1.38	9.0E-45	8922391	NT	Homo sapiens hypothetical protein FLJ10379 (FLJ10379), mRNA
6552	19317	32323	1.31	9.0E-45	AB023212.1	NT	Homo sapiens TRK-fused gene (NOTE: non-standard symbol and name) (TFG) mRNA
2527	15243	27982	3.12	8.0E-45	5174718	NT	Homo sapiens TRK-fused gene (NOTE: non-standard symbol and name) (TFG) mRNA
5023	17744	30355	6.41	8.0E-45	5174718	NT	CNM-NM0005-130300-283-b08 NM0005 Homo sapiens cDNA
6414	19182	32181	0.98	8.0E-45	AW892763.1	EST_HUMAN	EST38093 Synovial sarcoma Homo sapiens cDNA 5' end
8008	20701	33830	0.91	8.0E-45	AA377985.1	EST_HUMAN	w589c06.x1 NCI_CGAP_P728 Homo sapiens cDNA clone IMAGE:2313802 3' similar to contains L1.H L1 repetitive element;
1645	14291		1.01	6.0E-45	AI675425.1	EST_HUMAN	ai83h07.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2782908 3' similar to SW_R13A_HUMAN PAQ429 60S RIBOSOMAL PROTEIN L13A ;
3960	16709		4.09	6.0E-45	AW157570.1	EST_HUMAN	Homo sapiens ADP-ribosylation factor GTPase activating protein 1 (ARF GAP1), mRNA
12556	26378		1.65	6.0E-45	11418213	NT	Homo sapiens chromosome 21 segment HS21C003
872	13641		1.03	6.0E-45	AL163203.2	NT	CNM-CN0044-180200-515-f01 CN0044 Homo sapiens cDNA
1995	14731	27453	3.65	5.0E-45	BF333627.1	EST_HUMAN	tg94f07.x1 NCI_CGAP_CLL1 Homo sapiens cDNA clone IMAGE:2116453 3' similar to SW_PAX1_MOUSE P00084 PAIRED BOX PROTEIN PAX-1 ;
3204	15967	28621	1.79	5.0E-45	AI523766.1	EST_HUMAN	z72d03.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:727877 3' similar to contains element TAR1 repetitive element;
5426	18224	30935	8.76	5.0E-45	AA397781.1	EST_HUMAN	Homo sapiens MCP-1 gene and enhancer region
5923	18713	31666	1.31	5.0E-45	Y18933.1	NT	

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5929	18713	31670	1.31	5.0E-45	Y18933.1	NT	Homo sapiens MCP-1 gene and enhancer region
5974	18766	31717	0.79	5.0E-45	AB022318.1	NT	Homo sapiens mRNA for inducible nitric oxide synthase, complete cds
5974	18766	31718	0.78	5.0E-45	AB022318.1	NT	Homo sapiens mRNA for inducible nitric oxide synthase, complete cds
6066	18874	31842	1.02	5.0E-45	11496268	NT	Homo sapiens zinc finger protein 277 (ZNF277), mRNA
6066	18874	31843	1.02	5.0E-45	11496268	NT	Homo sapiens zinc finger protein 277 (ZNF277), mRNA
8174	20968	34000	0.73	5.0E-45	11418704	NT	Homo sapiens bone morphogenetic protein 5 (BMP5), mRNA
8939	21630	34773	1.95	5.0E-45	4759223	NT	Homo sapiens programmed cell death 5 (PDCD5), mRNA
11697	24282	37617	2.59	5.0E-45	8923698	NT	Homo sapiens golgin-like protein (GLP), mRNA
1121	13877	26536	9.58	4.0E-45	X95828.1	NT	H. sapiens ART4 gene
2289	15014	27750	2.42	4.0E-45	BE265622.1	EST_HUMAN	601194440F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3539425 5'
8855	21546		0.82	4.0E-45	AA228220.1	EST_HUMAN	nc26607.s1 NCI_CGAP_P1 Homo sapiens cDNA clone IMAGE:1009284 similar to contains element L1
4066	16085		1.35	3.0E-45	T71490.1	EST_HUMAN	repetitive element;
6142	18920	31890	1.36	3.0E-45	6753651	NT	yc35907.r1 Soares fetal liver spleen 1NFSL Homo sapiens cDNA clone IMAGE:110245 5'
6142	18920	31891	1.36	3.0E-45	6753651	NT	Mus musculus dynein, exon, heavy chain 11 (Dnahc11), mRNA
8350	21043		1.4	3.0E-45	AV723976.1	EST_HUMAN	Mus musculus dynein, exon, heavy chain 11 (Dnahc11), mRNA
8690	21382	34526	3.74	3.0E-45	4758451	NT	AV723976 HTB Homo sapiens cDNA clone HTBAAG01 5'
10206	22854	36068	13.43	3.0E-45	AL163227.2	NT	Homo sapiens golgi autoantigen, golgin subfamily a, 2 (GOLGA2) mRNA
10206	22854	36069	13.43	3.0E-45	AL163227.2	NT	Homo sapiens chromosome 21 segment HS21C027
12670	25314		2.35	3.0E-45	X98211.1	NT	H. sapiens DNA for endogenous retroviral like element
2506	15223		2.21	2.0E-45	AL163216.2	NT	Homo sapiens chromosome 21 segment HS21C018
3029	15795	28441	1.22	2.0E-45	AJ249213.1	NT	Homo sapiens partial 5-HT4 receptor gene, exons 2 to 5
6429	19197	32194	5.15	2.0E-45	L01065.1	NT	Human eosinophil Charcot-Leyden crystal (CLC) protein (lysophospholipase) gene, promoter and exon 1
7510	20181	33274	1.22	2.0E-45	BE782184.1	EST_HUMAN	601467793F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3870638 5'
8314	21007	34145	0.78	2.0E-45	AW834834.1	EST_HUMAN	RCO-L T0001-150200-032-411 L1T0001 Homo sapiens cDNA
9485	22138	35318	0.48	2.0E-45	AW836786.1	EST_HUMAN	ts56a01.x1 NCI_CGAP_Kid8 Homo sapiens cDNA clone IMAGE:2232552 3'
10705	25130	36633	18.28	2.0E-45	BE934350.1	EST_HUMAN	MF0-HT0923-190800-201-s02 HT0823 Homo sapiens cDNA
11129	23797	37073	4.16	2.0E-45	AA458770.1	EST_HUMAN	aa87T12.r1 Strategene fetal retina 937202 Homo sapiens cDNA clone IMAGE:838319 5' similar to
11488	24086	37400	1.76	2.0E-45	AW270280.1	EST_HUMAN	TR:G1144599 G1144599 R-SLY1.;
11488	24086	37401	1.75	2.0E-45	AW270280.1	EST_HUMAN	xp72a03.x1 NCI_CGAP_Ov40 Homo sapiens cDNA clone IMAGE:2745988 3'
12711	24987		3.93	2.0E-45	11418157	NT	xp72a03.x1 NCI_CGAP_Ov40 Homo sapiens cDNA clone IMAGE:2745988 3'
120	13185		-1.6	1.0E-45	BE388955.1	EST_HUMAN	Homo sapiens calcium channel, voltage-dependent, alpha 1I subunit (CACNA1I), mRNA
						EST_HUMAN	601284360F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3806183 5'

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
400	13185		2.17	1.0E-45	BE388955.1	EST_HUMAN	G01284360F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3808183 5'
460	13245	25887	1.38	1.0E-45	4508412	NT	Homo sapiens RAP1A, member of RAS oncogene family (RAP1A), mRNA
1151	13906	26559	1.79	1.0E-45	7657280	NT	Homo sapiens Langerhans cell specific c-type lectin (LANGERIN), mRNA
3101	15866	28507	7.42	1.0E-45	U32169.1	NT	Human pro- $\alpha 2$ chain of collagen type XI (COL11A2) gene, complete cds
3483	16240	28997	1.38	1.0E-45	8650558	NT	Homo sapiens chromosome 21 open reading frame 1 (C21orf4), mRNA
3560	16315	28982	1.19	1.0E-45	AB046811.1	NT	Homo sapiens mRNA for KIAA1501 protein, partial cds
4442	17178	29804	5.01	1.0E-45	BE396633.1	EST_HUMAN	G01289116F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3819803 5'
4877	17411		1.04	1.0E-45	H57443.1	EST_HUMAN	y05602.r1 Soares fetal liver spleen 1NFS Homo sapiens cDNA clone IMAGE:204363 5'
7930	20625	33752	0.77	1.0E-45	11422236	NT	Homo sapiens peroxisomal biogenesis factor 14 (PEX14), mRNA
7930	20625	33753	0.77	1.0E-45	11422236	NT	Homo sapiens peroxisomal biogenesis factor 14 (PEX14), mRNA
8905	21197	34341	0.96	1.0E-45	D87875.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
9019	21709	34861	5.08	1.0E-45	BE887843.1	EST_HUMAN	G01511228F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3912535 5'
9422	22100	35272	1.22	1.0E-45	AB002297.1	NT	Human mRNA for KIAA0289 gene, partial cds
11734	24327	37861	1.33	1.0E-45	7019570	NT	Homo sapiens alpha-catenin-like protein (VR22), mRNA
12087	24592	31125	0.83	1.0E-45	11418089	NT	Homo sapiens protein kinase C, alpha binding protein (PRKCABP), mRNA
12283	24708		11.18	1.0E-45	11528281	NT	Homo sapiens hypothetical protein FLJ20464 (FLJ20464), mRNA
12289	24711		5.28	1.0E-45	11418177	NT	Homo sapiens Ran GTPase activating protein 1 (RANGAP1), mRNA
12680	24969	30981	2.6	1.0E-45	11418167	NT	Homo sapiens calcium channel, voltage-dependent, alpha 1i subunit (CACNA1I), mRNA
8127	20821	33958	1.7	9.0E-46	9910293	NT	Mus musculus keratin complex 2, gene 6g (Krt2-6g), mRNA
8532	21224		5.86	9.0E-46	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C008
10378	23024	36239	11.23	9.0E-46	AW246984.1	EST_HUMAN	2822449.Sprime NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2822449 5'
2443	15182	27899	13.53	8.0E-46	A1433281.1	EST_HUMAN	t3208.x1 NCI_CGAP_Gee4 Homo sapiens cDNA clone IMAGE:2132198 3' similar to gb:J00314_ma2
2443	15182	27900	13.53	8.0E-46	A1433281.1	EST_HUMAN	TUBULIN BETA-1 CHAIN (HUMAN);
7953	20848		5.69	8.0E-46	BE167244.1	EST_HUMAN	TUBULIN BETA-1 CHAIN (HUMAN);
2232	14980	27700	1.03	7.0E-46	U46007.1	NT	Rattus norvegicus espin mRNA, complete cds
4641	17276		3.38	7.0E-46	BE386165.1	EST_HUMAN	G01277292F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3618119 5'
4755	17487		1.33	7.0E-46	BE064386.1	EST_HUMAN	RC4-BT0310-110300-015-10 BT0310 Homo sapiens cDNA
5051	18793	31682	4.01	7.0E-46	8922708	NT	Homo sapiens hypothetical protein FLJ10847 (FLJ10847), mRNA
6402	19171	32170	1.14	7.0E-46	BF105845.1	EST_HUMAN	G01822835F1 NIH_MGC_77 Homo sapiens cDNA clone IMAGE:4042736 5'
2758	15484	28207	3.99	6.0E-46	A1884381.1	EST_HUMAN	wm81108.x1 NCI_CGAP_U14 Homo sapiens cDNA clone IMAGE:2437576 3' similar to contains MER19.12
							MER19 repetitive element;

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2750	15464	28208	3.90	6.0E-46	A1884381.1	EST_HUMAN	wn31f08.x1 NCI_CGAP_UH Homo sapiens cDNA clone IMAGE:2437575 3' similar to contains MER19.12 MER19 repetitive element;
6038	18818	31779	10.94	6.0E-46	A035448.1	EST_HUMAN	1a58f10.x1 NCI_CGAP_Ku88 Homo sapiens cDNA clone IMAGE:2232835 3' similar to TR:O60363 O60363 SA GENE.;
7116	19804	32868	0.72	6.0E-46	AW813244.1	EST_HUMAN	2042604.x1 NCI_CGAP_UH1 Homo sapiens cDNA clone IMAGE:2706654 3' similar to gb:108069 DNAJ PROTEIN HOMOLOG 2 (HUMAN);
11364	23175		2.04	6.0E-46	BE784971.1	EST_HUMAN	601478409F1 NH1_MGC_68 Homo sapiens cDNA clone IMAGE:3880995 5'
199	13012		8.9	5.0E-46	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
3519	16275	28629	1.07	5.0E-46	BE677194.1	EST_HUMAN	7d81g01.x1 Lupsaki_dorsal_root_ganglion Homo sapiens cDNA clone IMAGE:3279408 3'
3519	16275	28630	1.07	5.0E-46	BE677194.1	EST_HUMAN	7d81g01.x1 Lupsaki_dorsal_root_ganglion Homo sapiens cDNA clone IMAGE:3279408 3'
6636	18398	32413	1.86	5.0E-46	BF580442.1	EST_HUMAN	nae3807.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3288757 3' similar to TR:O75202 O75202 HOMOLOG OF RAT KIDNEY-SPECIFIC;
6842	19542	32570	4.29	5.0E-46	BF347228.1	EST_HUMAN	60202184F1 NCI_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4166670 5'
6695	19687	32736	0.62	5.0E-46	AW362263.1	EST_HUMAN	QV4-ST0212-120100-075-08 ST0212 Homo sapiens cDNA
9515	22168	35350	0.47	5.0E-46	AA308381.1	EST_HUMAN	266208.81 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:726926 3'
626	13405		1.4	4.0E-46	AA601143.1	EST_HUMAN	nc54609.a1 NCI_CGAP_SS1 Homo sapiens cDNA clone IMAGE:1104520 3' similar to gb:X53741_mari FIBULIN-1, ISOFORM A PRECURSOR (HUMAN);
1099	14442	27140	6.86	4.0E-46	AW770544.1	EST_HUMAN	H86603.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3008836 3' similar to gb:X14008_mari LYSOZYME C PRECURSOR (HUMAN); contains element MER37 repetitive element;
1099	14442	27141	6.86	4.0E-46	AW770544.1	EST_HUMAN	H86603.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3008836 3' similar to gb:X14008_mari LYSOZYME C PRECURSOR (HUMAN); contains element MER37 repetitive element;
2743	15449	28188	2.62	4.0E-46	M18048.1	NT	Human endogenous retrovirus RTVL-H2
4384	17121	29763	1.04	4.0E-46	AB014522.1	NT	Homo sapiens mRNA for KIAA0622 protein, partial cds
4384	17121	29764	1.04	4.0E-46	AB014522.1	NT	Homo sapiens mRNA for KIAA0622 protein, partial cds
5350	18153	30834	2.43	4.0E-46	M38852.1	NT	Human Ig germline gamma-3 heavy-chain gene V region, partial cds
5350	18153	30835	2.43	4.0E-46	M38852.1	NT	Human Ig germline gamma-3 heavy-chain gene V region, partial cds
12513	24863	31014	2.71	4.0E-46	AB002059.1	NT	Homo sapiens DNA for Human P2XM, complete cds
2155	14895	27618	0.9	3.0E-46	5453620	NT	Homo sapiens acute carrier family 35 (CMP-sialic acid transporter), member 1 (SLC35A1), mRNA
2429	15150	27884	0.95	3.0E-46	AF160212.1	NT	Homo sapiens VAMP-associated 33 kDa protein mRNA, complete cds
4362	17100	28735	0.79	3.0E-46	4508378	NT	Homo sapiens mitogen-activated protein kinase kinase kinase 3 (MAP4K3), mRNA
4724	17456	30091	1.2	3.0E-46	Z73980.1	NT	H. sapiens Ig lambda light chain variable region gene (7c.11.2) germline; Ig-Light-Lambda; VLambda

Table 4  
Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4724	17456	30092	1.2	3.0E-46	Z73660.1	NT	H. sapiens Ig lambda light chain variable region gene (7c.11.2) germline; Ig-Light-Lambda; VLambda
8947	21339	34483	7.69	3.0E-46	A1831492.1	EST_HUMAN	wf49c04.x1 NCL_CGAP_Lu19 Homo sapiens cDNA clone IMAGE:2406160 3' similar to contains THR.b2
11684	24163	37474	2.19	3.0E-46	D31765.1	NT	THR repetitive element;
817	13598	26255	7.64	2.0E-46	AA468046.1	EST_HUMAN	Human mRNA for KIAA0001 gene, partial cds
1554	14301		1.55	2.0E-46	AA678246.1	EST_HUMAN	ne06a09.s1 NCL_CGAP_Cc3 Homo sapiens cDNA clone IMAGE:890408 3' similar to contains THR.b2 THR repetitive element;
1637	14383	27070	3.43	2.0E-46	U78027.1	NT	227a11.s1 Soares fetal liver spleen_1NFSL_S1 Homo sapiens cDNA clone IMAGE:431998 3'
4917	17845	30258	1.2	2.0E-46	AA369288.1	EST_HUMAN	Homo sapiens Bruton's tyrosine kinase (BTK), alpha-D-galactosidase A (GLA), L44-like ribosomal protein (L44L) and FTP3 (FTP3) genes, complete cds
7384	20064	33142	7.67	2.0E-46	9910569	NT	z59e02.r1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:720650 5' similar to SW:RSP1_MOUSE Q01730 RSP-1 PROTEIN.;
7968	20663		1.46	2.0E-46	BE89151.1	EST_HUMAN	Mus musculus sperm tail associated protein (Slap), mRNA
1257	25179		1.5	2.0E-46	H48391.1	EST_HUMAN	601445137F1 NIH_MGC_95 Homo sapiens cDNA clone IMAGE:3849297 5'
12575	25170	30902	3.38	2.0E-46	AW277214.1	EST_HUMAN	y32d01.r1 Soares fetal liver spleen_1NFSL Homo sapiens cDNA clone IMAGE:200977 5'
1211	13961	26628	7.67	1.0E-46	4502864	NT	xq78h03.x1 NCL_CGAP_Lu34 Homo sapiens cDNA clone IMAGE:2756789 3'
1566	14313	26968	1.23	1.0E-46	7662177	NT	Homo sapiens cell division cycle 10 (homologous to CDC10 of S. cerevisiae) (CDC10) mRNA
1566	14313	27000	1.23	1.0E-46	7662177	NT	Homo sapiens KIAA0555 gene product (KIAA0555), mRNA
2270	15005	27745	3.44	1.0E-46	AW978516.1	EST_HUMAN	Homo sapiens KIAA0555 gene product (KIAA0555), mRNA
2399	15120	27857	3.06	1.0E-46	H97330.1	EST_HUMAN	EST390625 MAGE resequences, MAGP Homo sapiens cDNA
3243	16005	28654	4.55	1.0E-46	AA831912.1	EST_HUMAN	EST485095 WATM1 Homo sapiens cDNA clone 49b095
4818	17649		3.17	1.0E-46	AB023197.1	NT	np78b02.s1 NCL_CGAP_P12 Homo sapiens cDNA clone IMAGE:1132305 similar to gb:X76717 H. sapiens MT-11 mRNA. (HUMAN);
5613	18409	31322	0.88	1.0E-46	BF194707.1	EST_HUMAN	Homo sapiens mRNA for KIAA0980 protein, partial cds
5888	25080	31617	6.14	1.0E-46	8923762	NT	7692b01.x1 NCL_CGAP_Ov18 Homo sapiens cDNA clone IMAGE:3843705 3'
5888	25080	31618	6.14	1.0E-46	8923762	NT	Homo sapiens centaurin-alpha 2 protein (HSA272195), mRNA
10770	18409	31322	5.27	1.0E-46	BF194707.1	EST_HUMAN	Homo sapiens centaurin-alpha 2 protein (HSA272195), mRNA
11747	24338	37665	1.53	1.0E-46	AW023178.1	EST_HUMAN	7692b01.x1 NCL_CGAP_Ov18 Homo sapiens cDNA clone IMAGE:3843705 3'
11747	24338	37668	1.53	1.0E-46	AW023178.1	EST_HUMAN	df50e03.y1 Marfan Fetal Cochlea Homo sapiens cDNA clone IMAGE:2488861 5'
12044	24564	31115	2.28	1.0E-46	BF531102.1	EST_HUMAN	df50e03.y1 Marfan Fetal Cochlea Homo sapiens cDNA clone IMAGE:2488861 5'
12044	24564	31116	2.28	1.0E-46	BF531102.1	EST_HUMAN	602072284F1 NCL_CGAP_Bim67 Homo sapiens cDNA clone IMAGE:4215398 5'
12778	25032		2.37	1.0E-46	AV716377.1	EST_HUMAN	602072284F1 NCL_CGAP_Bim67 Homo sapiens cDNA clone IMAGE:4215398 5'
750	13522		6.18	9.0E-47	AJ271735.1	NT	AV716377 DCB Homo sapiens cDNA clone DCBAIE03 5'
							Homo sapiens Xq pseudautosomal region; segment 1/2



Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5922	18707	31660	5.41	3.0E-47	AW408800.1	EST_HUMAN	UHF-BM0-adv-d-07-0-JL1 NIH_MGC_38 Homo sapiens cDNA clone IMAGE:3063205 5'
6469	18236		1.76	3.0E-47	AF222413.1	EST_HUMAN	q04007.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1843716 3'
8732	21424	34569	0.71	3.0E-47	AW963796.1	EST_HUMAN	EST375899 MAGC resequences, MAGH Homo sapiens cDNA
8732	21424	34570	0.71	3.0E-47	AW963796.1	EST_HUMAN	EST375899 MAGC resequences, MAGH Homo sapiens cDNA
143	12958	26600	1.61	2.0E-47	4503318	NT	Homo sapiens myosin phosphatase, target subunit 2 (MYPT2), mRNA
947	13713	26377	2.69	2.0E-47	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
947	13713	26378	2.69	2.0E-47	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
1560	14307		0.98	2.0E-47	AB96279.1	EST_HUMAN	w080602.x1 NCI_CGAP_G08 Homo sapiens cDNA clone IMAGE:2479851 3'
1588	14334	27022	1.75	2.0E-47	7682109	NT	Homo sapiens KIAA0428 gene product (KIAA0428), mRNA
1673	14418	27111	3.41	2.0E-47	AA524514.1	EST_HUMAN	ng43h12.s1 NCI_CGAP_C03 Homo sapiens cDNA clone IMAGE:937607 3'
4313	17052	29677	2	2.0E-47	4504898	NT	Homo sapiens ring finger protein (C3HC4 type) 8 (RNF8), mRNA
4351	17090	29722	1.5	2.0E-47	AA569592.1	EST_HUMAN	nf23g07.s1 NCI_CGAP_P11 Homo sapiens cDNA clone IMAGE:914652
4351	17090	29723	1.5	2.0E-47	AA569592.1	EST_HUMAN	nf23g07.s1 NCI_CGAP_P11 Homo sapiens cDNA clone IMAGE:914652
4471	17206	29832	1.66	2.0E-47	5174648	NT	Homo sapiens Revf1 activation domain binding protein-related (RAB-R) mRNA
4761	17493	30121	1.3	2.0E-47	AW965168.1	EST_HUMAN	EST377239 MAGC resequences, MAGI Homo sapiens cDNA
5998	18490	31411	1.12	2.0E-47	AF073921.1	NT	Homo sapiens regulator of G-protein signalling 6 variant form (RGS6) mRNA, complete cds
5987	18673	31615	1.23	2.0E-47	BE778475.1	EST_HUMAN	G01463932F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3867487 5'
5987	18673	31616	1.23	2.0E-47	BE778475.1	EST_HUMAN	G01463932F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3867487 5'
7598	25116		1.43	2.0E-47	L09731.1	NT	Homo sapiens 5-hydroxytryptamine 1D receptor pseudogene with an Alu repeat insertion
7864	20559	33685	1.92	2.0E-47	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
7864	20559	33686	1.92	2.0E-47	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
8618	21310	34452	1.67	2.0E-47	AF071771.1	NT	Homo sapiens SPH-binding factor mRNA, partial cds
9389	22051	35222	0.77	2.0E-47	11526136	NT	Homo sapiens BTG family, member 3 (BTG3), mRNA
11451	23218	36451	1.27	2.0E-47	M78125.1	NT	Human tyrosine kinase receptor (ad) mRNA, complete cds
							y82a08.s1 Soares Infant brain 1N1B Homo sapiens cDNA clone IMAGE:29968 3' similar to contains OFR repetitive element;
12077	25312	30709	1.76	2.0E-47	R42423.1	EST_HUMAN	qp99h03.x1 Soares_fetal lung_NHL-10W Homo sapiens cDNA clone IMAGE:1801189 3'
1384	14131	26804	7.35	1.0E-47	A533429.1	EST_HUMAN	RC3-ST0197-130400-017-J02 ST0197 Homo sapiens cDNA
5017	17738	30347	1.96	1.0E-47	AW813906.1	EST_HUMAN	at19a06.x1 Barstead acra HP1RB8 Homo sapiens cDNA clone IMAGE:2355586 3' similar to gb:M22895
6644	19426	32441	6.79	1.0E-47	A1890886.1	EST_HUMAN	RAS-RELATED PROTEIN RAP-1A (HUMAN);
8707	21459		0.59	1.0E-47	AW964948.1	EST_HUMAN	h84a11.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2978972 3' similar to gb:M28328
10254	22802	36112	2.28	1.0E-47	L30115.1	NT	KERATIN, TYPE I CYTOSKELETAL 18 (HUMAN);
							Pepto hemadryes alcohol dehydrogenase class I (ADH) gene, 5' region



Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1907	14363	27041	3.03	9.0E-48	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
3544	16238	28900	0.82	9.0E-48	BF359647.1	EST_HUMAN	CM2-MT0100-310700-280-405 MTD100 Homo sapiens cDNA
5594	18389	31299	0.86	9.0E-48	BE888198.1	EST_HUMAN	601511714F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3913106 5'
5594	18389	31300	0.86	9.0E-48	BE888198.1	EST_HUMAN	601511714F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3913106 5'
8010	18791	31754	0.86	9.0E-48	AB33198.1	EST_HUMAN	601511714F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3913106 5'
6131	18909	31877	0.84	9.0E-48	AU123240.1	EST_HUMAN	601511714F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3913106 5'
11080	23730	37002	3.09	9.0E-48	BE393813.1	EST_HUMAN	601511714F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3913106 5'
1228	13978		1.44	8.0E-48	4501900	NT	601511714F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3913106 5'
1229	13978		1.7	8.0E-48	4501900	NT	601511714F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3913106 5'
3132	16897	28541	4.38	8.0E-48	AW768477.1	EST_HUMAN	Homo sapiens antihydrolyase 1 (ACY1), mRNA
3132	16897	28541	4.38	8.0E-48	AW768477.1	EST_HUMAN	Homo sapiens antihydrolyase 1 (ACY1), mRNA
3132	16897	28541	4.38	8.0E-48	AW768477.1	EST_HUMAN	Homo sapiens antihydrolyase 1 (ACY1), mRNA
3911	16891	28302	0.79	8.0E-48	4504116	NT	Homo sapiens antihydrolyase 1 (ACY1), mRNA
478	13264		1.27	7.0E-48	AB033035.1	NT	Homo sapiens antihydrolyase 1 (ACY1), mRNA
479	13264		17.09	7.0E-48	AB033035.1	NT	Homo sapiens antihydrolyase 1 (ACY1), mRNA
1483	14230	26916	0.98	7.0E-48	6912719	NT	Homo sapiens antihydrolyase 1 (ACY1), mRNA
1634	14380	27067	3.89	7.0E-48	5730038	NT	Homo sapiens antihydrolyase 1 (ACY1), mRNA
6460	19227	32227	27.21	7.0E-48	11418831	NT	Homo sapiens antihydrolyase 1 (ACY1), mRNA
5967	18749	31710	0.91	6.0E-48	AB006955.1	NT	Homo sapiens antihydrolyase 1 (ACY1), mRNA
6888	19805	32645	1.08	6.0E-48	11420885	NT	Homo sapiens antihydrolyase 1 (ACY1), mRNA
7365	25111	33123	0.68	6.0E-48	AB046844.1	NT	Homo sapiens antihydrolyase 1 (ACY1), mRNA
7365	25111	33124	0.58	6.0E-48	AB046844.1	NT	Homo sapiens antihydrolyase 1 (ACY1), mRNA
9022	21712	34866	2.07	6.0E-48	AF026816.1	NT	Homo sapiens antihydrolyase 1 (ACY1), mRNA
9441	22119	35298	1.74	6.0E-48	11427428	NT	Homo sapiens antihydrolyase 1 (ACY1), mRNA
9588	22241	35425	3.2	6.0E-48	AA188080.1	EST_HUMAN	Homo sapiens antihydrolyase 1 (ACY1), mRNA
3304	17878	28713	1.94	5.0E-48	4826891	NT	Homo sapiens antihydrolyase 1 (ACY1), mRNA
8474	21166	34310	1.25	5.0E-48	BE064410.1	EST_HUMAN	Homo sapiens antihydrolyase 1 (ACY1), mRNA
11603	24202	37524	1.39	5.0E-48	AW890298.1	EST_HUMAN	Homo sapiens antihydrolyase 1 (ACY1), mRNA
10878	23568	36805	3.96	4.0E-48	AB020420.1	EST_HUMAN	Homo sapiens antihydrolyase 1 (ACY1), mRNA
1364	14112	26786	1.27	3.0E-48	AV690964.1	EST_HUMAN	Homo sapiens antihydrolyase 1 (ACY1), mRNA

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1969	14705	27422	15.26	3.0E-48	4885170	NT	Homo sapiens chromosome X open reading frame 6 (CXORF6) mRNA
1969	14705	27423	15.26	3.0E-48	4885170	NT	Homo sapiens chromosome X open reading frame 6 (CXORF6) mRNA
3622	16375	28017	0.76	3.0E-48	AW064831.1	EST_HUMAN	h14b12.x1 NCI_CGAP_GU1 Homo sapiens cDNA clone IMAGE:2972255 3' similar to SW:DCRB_HUMAN
5804	18594	31519	2.47	3.0E-48	BE084571.1	EST_HUMAN	P56555 DOWN SYNDROME CRITICAL REGION PROTEIN B. ;
6919	19655	32701	0.94	3.0E-48	AF087913.1	NT	MR4-BT0657-080400-201-e10 BT0657 Homo sapiens cDNA
							Human endogenous retrovirus HERV-P-T47D
8290	20884		3.41	3.0E-48	AA659630.1	EST_HUMAN	nm03705.s1 NCI_CGAP_P122 Homo sapiens cDNA clone IMAGE:1219137 3' similar to contains PTR5.b1
10784	23467	36708	9.52	3.0E-48	BF514170.1	EST_HUMAN	PTR5 repetitive element ;
44	12873	25495	1.71	2.0E-48	AA631940.1	EST_HUMAN	U1H-BW1-eri-e-10-0-J1.s1 NCI_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3082267 3'
1197	13949		5.15	2.0E-48	H24278.1	EST_HUMAN	hm67 Regional genomic DNA specific cDNA library Homo sapiens cDNA clone CR17-28
4495	17231	29861	1.42	2.0E-48	BE240055.1	EST_HUMAN	ym55e10.r1 Soares Infant brain 1NIB Homo sapiens cDNA clone IMAGE:52182 5' similar to
5724	18516	31436	0.61	2.0E-48	AA613171.1	EST_HUMAN	SP-M6B_MOUSE P35803 MEMBRANE GLYCOPROTEIN ;
5724	18516	31437	0.61	2.0E-48	AA613171.1	EST_HUMAN	TCBAP1D3842 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project-TCBA Homo sapiens cDNA clone TCBAF3842
7419	20096	33182	4.77	2.0E-48	AB040934.1	NT	nm18g01.s1 NCI_CGAP_Phe1 Homo sapiens cDNA clone IMAGE:1101072 3'
7419	20096	33183	4.77	2.0E-48	AB040934.1	NT	nm18g01.s1 NCI_CGAP_Phe1 Homo sapiens cDNA clone IMAGE:1101072 3'
7432	20109	33187	3.35	2.0E-48		NT	Homo sapiens mRNA for KIAA1501 protein, partial cds
8253	20947	34064	1.33	2.0E-48	AV743451.1	EST_HUMAN	Homo sapiens v-rel avian reticuloendotheliosis viral oncogene homolog A (nuclear factor of kappa light polypeptide gene enhancer in B-cells 3 (p65)) (RELA), mRNA
12041	17888	30486	4.27	2.0E-48	AA465007.1	EST_HUMAN	AV743451 CB Homo sapiens cDNA clone CBCCGG10 5'
12367	25232	30820	1.86	2.0E-48	BE737154.1	EST_HUMAN	z68-c03.r1 Soares ovary tumor N6HOT Homo sapiens cDNA clone IMAGE:310052 5'
12716	13949		1.34	2.0E-48	H24278.1	EST_HUMAN	601305064F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3639782 5'
54	12883	25511	2.3	1.0E-48		NT	ym55e10.r1 Soares Infant brain 1NIB Homo sapiens cDNA clone IMAGE:52182 5' similar to
853	13623	26293	17.13	1.0E-48	4502166	NT	SP-M6B_MOUSE P35803 MEMBRANE GLYCOPROTEIN ;
1273	14023	28691	3.77	1.0E-48	5032032	NT	Homo sapiens disialin resistance-associated overexpressed protein (LOC51747), mRNA
1911	14848	27359	30.36	1.0E-48	AL163302.2	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
3481	16238	28894	0.86	1.0E-48	AL163246.2	NT	Homo sapiens RNA binding motif protein 6 (RBM6) mRNA
5061	17780	30398	1.5	1.0E-48	MT0976.1	NT	Homo sapiens chromosome 21 segment HS21C102
6195	18971	31946	1.17	1.0E-48	AI889077.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C046
							Human endogenous retroviral DNA (4-1), complete retroviral segment
							h17c01.x1 NCI_CGAP_Cot16 Homo sapiens cDNA clone IMAGE:2075904 3' similar to TR:O14588 O14588 SIMILARITY TO U73941 ;

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6196	18971	31047	1.17	1.0E-48	A889077.1	EST_HUMAN	Id17q01.x1 NCL_CGAP_Cot16 Homo sapiens cDNA clone IMAGE:2075804 3' similar to TR:O14588 O14588 SIMILARITY TO U73941;
6407	19176		0.94	1.0E-48	Y18000.1	NT	Homo sapiens NF2 gene
6500	19265	32266	0.71	1.0E-48	AB028994.1	NT	Homo sapiens mRNA for KIAA1071 protein, partial cds
6500	19265	32267	0.71	1.0E-48	AB028994.1	NT	Homo sapiens mRNA for KIAA1071 protein, partial cds
7157	19844	32913	2.52	1.0E-48	4755137	NT	Homo sapiens huntingtin (Huntington disease) (HD) mRNA
8730	21422	34566	0.76	1.0E-48	4758995	NT	Homo sapiens mitogen-activated protein kinase kinase 13 (MAP3K13), mRNA
8730	21422	34567	0.76	1.0E-48	4758995	NT	Homo sapiens mitogen-activated protein kinase kinase 13 (MAP3K13), mRNA
9113	21801	34996	0.84	1.0E-48	4502838	NT	Homo sapiens Chediak-Higashi syndrome 1 (CHS1) mRNA
9168	21838	35004	6.4	1.0E-48	AB033071.1	NT	Homo sapiens mRNA for KIAA1245 protein, partial cds
9481	22134	35314	5.33	1.0E-48	BF304883.1	EST_HUMAN	601888096F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4122119 5'
10269	22917	36127	4.08	1.0E-48	11429808	NT	Homo sapiens B cell linker protein (SLP65), mRNA
10269	22917	36128	4.08	1.0E-48	11429808	NT	Homo sapiens B cell linker protein (SLP65), mRNA
2002	14737	27461	1.13	8.0E-49	AB028497.1	NT	Mus musculus MyoPDZ mRNA for myosin containing PDZ domain, complete cds
5982	18744	31704	3.43	8.0E-49	10048417	NT	Mus musculus T-box 20 (Tbx20), mRNA
5982	18744	31705	3.43	8.0E-49	10048417	NT	Mus musculus T-box 20 (Tbx20), mRNA
8194	20898	34026	3.17	8.0E-49	U23850.1	NT	Human Prost1 1,4,5 trisphosphate receptor type 1 mRNA, partial cds
9889	22539	35733	1.15	8.0E-49	AB008681.1	NT	Homo sapiens gene for activin receptor type IIB, complete cds
135	13171	25814	1	7.0E-49	5729990	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, ATPase, 4 (PSMC4) mRNA
135	13171	25815	1	7.0E-49	5729990	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, ATPase, 4 (PSMC4) mRNA
384	13171	25814	1.73	7.0E-49	5729990	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, ATPase, 4 (PSMC4) mRNA
384	13171	25815	1.73	7.0E-49	5729990	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, ATPase, 4 (PSMC4) mRNA
385	13171	25814	2.94	7.0E-49	5729990	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, ATPase, 4 (PSMC4) mRNA
385	13171	25815	2.94	7.0E-49	5729990	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, ATPase, 4 (PSMC4) mRNA
1199	13951	26815	3.4	7.0E-49	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
6373	18173	30962	2.11	7.0E-49	AB07191.1	EST_HUMAN	wf28h04.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2356963 3' similar to TR:O54923 O54923 RSEC15;
6383	18183	30973	1.46	7.0E-49	AL120637.1	EST_HUMAN	DKFZp762C033_s1 762 (synonym: hmel2) Homo sapiens cDNA clone DKFZp762C033 3'
5716	18173	30962	0.87	7.0E-49	AB07191.1	EST_HUMAN	wf28h04.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2356963 3' similar to TR:O54923 O54923 RSEC15;
192	13005	25848	12.12	6.0E-49	AW731740.1	EST_HUMAN	ba55g05.x1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2800504 3' similar to gb:U17206 40S RIBOSOMAL PROTEIN S4 (HUMAN); gb:M20632 Mouse LLRep3 protein mRNA from a repetitive element, complete (MOUSE);
4095	16837	29464	1.27	6.0E-49	AL162091.1	EST_HUMAN	DKFZp761A138_s1 761 (synonym: hamy2) Homo sapiens cDNA clone DKFZp761A138 3'

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6349	19119	32109	0.94	6.0E-49	AU140742.1	EST_HUMAN	AU140742 PLAGE4 Homo sapiens cDNA clone PLAGE4000148 5'
7314	19897	33076	0.89	6.0E-49	AW511226.1	EST_HUMAN	h444802.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2912378 3' similar to TR:095636
9633	22285	35476	0.45	6.0E-49	9910293	NT	095636 CAMP-REGULATED GUANINE NUCLEOTIDE EXCHANGE FACTOR II.;
9633	22285	35476	0.45	6.0E-49	9910293	NT	Mus musculus keratin complex 2, gene 6g (K12-6g), mRNA
11248	23910	37202	2.6	6.0E-49	AW452218.1	EST_HUMAN	U1H-B13-alo-e-05-Q-U1.s1 NCI CGAP_Sub5 Homo sapiens cDNA clone IMAGE:3068048 3'
11661	24257	37579	2.6	6.0E-49	AA396556.1	EST_HUMAN	EST77625 Pancreas tumor III Homo sapiens cDNA 5' end
11661	24257	37580	2.6	6.0E-49	AA396556.1	EST_HUMAN	EST77625 Pancreas tumor III Homo sapiens cDNA 5' end
12382	25151		2.03	6.0E-49	AA707667.1	EST_HUMAN	z129c08.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:451694 3'
695	13470	26117	7	5.0E-49	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
695	13470	26118	7	5.0E-49	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
1796	14527	27295	3.49	5.0E-49	AA172121.1	EST_HUMAN	zp29c07.r1 Striatogene neuroepithelium (#637231) Homo sapiens cDNA clone IMAGE:610960 5' similar to TR:G233228 G233228 RTVL-H PROTEIN.; contains LTR7.13 LTR7 repetitive element;
2764	16469	28201	4.25	5.0E-49	U17714.1	NT	Homo sapiens putative tumor suppressor ST13 (ST13) mRNA, complete cds
3267	18029	28878	2.04	5.0E-49	11496355	NT	Homo sapiens similar to ribosomal protein S27 (metalloprotein 1) (H. sapiens) (LOC83382), mRNA
512	13296	25927	47.84	4.0E-49	AW189633.1	EST_HUMAN	X08601.x1 NCI CGAP_U14 Homo sapiens cDNA clone IMAGE:2675593 3' similar to WP:B0350.2B CE06703;
7172	19858	32930	0.95	4.0E-49	11525737	NT	Homo sapiens UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase 8 (GalNAc-T8) (GALNT8), mRNA
7172	19858	32931	0.95	4.0E-49	11525737	NT	Homo sapiens UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase 8 (GalNAc-T8) (GALNT8), mRNA
7710	20374	33498	0.9	4.0E-49	7662209	NT	Homo sapiens KIAA0623 gene product (KIAA0623), mRNA
8763	21465	34604	0.47	4.0E-49	11425374	NT	Homo sapiens copine III (CPNE3), mRNA
8763	21455	34605	0.47	4.0E-49	11425374	NT	Homo sapiens copine III (CPNE3), mRNA
12221	25368		4.21	4.0E-49	AA210798.1	EST_HUMAN	z129c05.r1 NCI CGAP_GCB1 Homo sapiens cDNA clone IMAGE:682977 5'
12306	24730		4.1	4.0E-49	AF240786.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
547	13330	25961	1.73	3.0E-49	X06506.1	NT	H. sapiens mRNA for acetyl-CoA carboxylase
2654	15364		1.9	3.0E-49	AA016131.1	EST_HUMAN	z631c05.r1 Soares retina N2b-4HR Homo sapiens cDNA clone IMAGE:360584 5' similar to contains L1.13 L1 repetitive element;
4923	17651	30264	2.33	3.0E-49	U48999.1	NT	Human type IV collagen (COL4A6) gene, exon 40
7319	20002	33081	11.87	3.0E-49	H39479.1	EST_HUMAN	EST25e12 WA TM1 Homo sapiens cDNA clone Z5e12

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11272	23933	37228	1.98	3.0E-49	A3337581.1	EST_HUMAN	EST42572 Endometrial tumor Homo sapiens cDNA 5' end
646	13425		2.94	2.0E-49	BE165980.1	EST_HUMAN	MR3-H10497-150200-113-g01 HTD487 Homo sapiens cDNA
3216	15979	28630	1.64	2.0E-49	N26446.1	EST_HUMAN	yx23d06.r1 Soares melanocyte 2N1H1M Homo sapiens cDNA clone IMAGE:262571 5'
							oz88d02.x1 Soares, aeroseant, fibroblasts, NBH5F Homo sapiens cDNA clone IMAGE:1682403 3' similar to
4746	17478	30110	0.68	2.0E-49	A167357.1	EST_HUMAN	gb.M31470 RAS-LIKE PROTEIN TC10 (HUMAN); contains Alu repetitive element; contains element MER22
4758	17490	30118	0.74	2.0E-49	BF511846.1	EST_HUMAN	UH-H814-aps-d-02-0-J1.s1 NCI_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3088638 3'
6637	19399	32414	1.17	2.0E-49	AV717638.1	EST_HUMAN	AV717638 DCB Homo sapiens cDNA clone DCBALB01 5'
7998	20893		1.74	2.0E-49	M86033.1	EST_HUMAN	EST02558 Fetal brain, Striatum (cat0303206) Homo sapiens cDNA clone HFBCY50
12316	25250		2.07	2.0E-49	AF163964.1	NT	Homo sapiens SNCA isoform (SNCA) gene, complete cds, alternatively spliced
879	13848		5	1.0E-49	BF033327.1	EST_HUMAN	601459531F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3862088 5'
1546	14292	28978	1.11	1.0E-49	4557887	NT	Homo sapiens keratin 18 (KRT18) mRNA
1794	14534	27243	4.82	1.0E-49	BE258216.1	EST_HUMAN	601115769F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3356273 5'
5275	18080	30737	6.82	1.0E-49	BF131007.1	EST_HUMAN	601820033F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:4052052 5'
5986	18787	31731	0.88	1.0E-49	H18291.1	EST_HUMAN	yr48h04.r1 Soares adult brain N2b5HB55Y Homo sapiens cDNA clone IMAGE:171703 5' similar to
5992	18773	31736	5.55	1.0E-49	AW064640.1	EST_HUMAN	SP:CBG1_HUMAN Q08447 GUANINE NUCLEOTIDE-BINDING PROTEIN G(T) GAMMA-1 SUBUNIT;
7117	19805	32869	0.62	1.0E-49	AV703000.1	EST_HUMAN	EST376713 MAGC resequences, MAGH Homo sapiens cDNA
7117	19805	32870	0.62	1.0E-49	AV703000.1	EST_HUMAN	AV703000 ADB Homo sapiens cDNA clone ADBCV011 5'
7123	19811	32878	3.55	1.0E-49	BE398110.1	EST_HUMAN	AV703000 ADB Homo sapiens cDNA clone ADBCV011 5'
7123	19811	32879	3.55	1.0E-49	BE398110.1	EST_HUMAN	601290330F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3620863 5'
							601290330F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3620863 5'
7200	19888	32860	2.21	1.0E-49	N25884.1	EST_HUMAN	yw78g12.s1 Soares, placenta, 8to6weeks, 2N1HFP860W Homo sapiens cDNA clone IMAGE:258406 3'
							similar to gb:X65873 KINESIN HEAVY CHAIN (HUMAN);
7200	19888	32861	2.21	1.0E-49	N25884.1	EST_HUMAN	yw78g12.s1 Soares, placenta, 8to6weeks, 2N1HFP860W Homo sapiens cDNA clone IMAGE:258406 3'
7977	20672	33795	0.69	1.0E-49	11321580	NT	similar to gb:X65873 KINESIN HEAVY CHAIN (HUMAN);
7977	20672	33796	0.69	1.0E-49	11321580	NT	Homo sapiens succinate-CoA ligase, GDP-forming, alpha subunit (SUCLG1), mRNA
8575	21267		0.68	1.0E-49	9994184	NT	Homo sapiens succinate-CoA ligase, GDP-forming, alpha subunit (SUCLG1), mRNA
8891	21582	34721	1.29	1.0E-49	BE409340.1	EST_HUMAN	Homo sapiens RNA binding motif protein 7 (LOC51120), mRNA
10026	22674	35889	1.58	1.0E-49	AL043129.2	EST_HUMAN	601300892F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3863388 5'
10979	23654	36907	1.43	1.0E-49	AV751477.1	EST_HUMAN	DKFZP434D2423_1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZP434D2423 5'
11281	23942	37236	3.32	1.0E-49		NT	AV751477 NPD Homo sapiens cDNA clone NPDAWE04 5'
12215	24677		2.48	1.0E-49	11427368	NT	Homo sapiens brefeldin A-inhibited guanine nucleotide-exchange protein 1 (BIG1), mRNA
					11418322	NT	Homo sapiens cadherin EGF LAG seven-pass G-type receptor 1 (CELSR1), mRNA
4837	17685		1.4	9.0E-50	AF101475.1	NT	Homo sapiens glycine N-methyltransferase (GNMT) gene, complete cds

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6310	25421		0.93	8.0E-50	BE295798.1	EST_HUMAN	601176250F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3531588 5'
166	12980	26619	4.05	8.0E-50	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
702	13477	26125	2.54	8.0E-50	X95097.2	NT	Homo sapiens mRNA for VIP receptor 2
702	13477	26126	2.54	8.0E-50	X95097.2	NT	Homo sapiens mRNA for VIP receptor 2
1768	14500	27201	2.82	8.0E-50	4501890	NT	Homo sapiens actinin, alpha 1 (ACTN1) mRNA
2703	15410	28147	1.48	8.0E-50	4826358	NT	Homo sapiens capping protein (actin filament) muscle Z-line, beta (CAPZB), mRNA
2833	14691		15.7	8.0E-50	D90334.1	NT	Homo sapiens hepatocyte growth factor (HGF) gene, exon 18
11385	23692	37293	1.29	8.0E-50	AA633467.1	EST_HUMAN	np62406.s1 NCI_CGAP_Br2 Homo sapiens cDNA clone IMAGE:1130891 3' similar to gb:J05459
605	13383	20015	0.76	7.0E-50	BE089591.1	EST_HUMAN	GLUTATHIONE S-TRANSFERASE TESTIS/BRAIN (HUMAN);
6887	19604	32843	1.06	7.0E-50	BF091922.1	EST_HUMAN	QV0-BT0703-280400-211-c08 BT0703 Homo sapiens cDNA
6887	19604	32844	1.06	7.0E-50	BF091922.1	EST_HUMAN	RC6-TN0073-150900-011-A12 TN0073 Homo sapiens cDNA
7205	19690	32366	0.6	7.0E-50	AA627822.1	EST_HUMAN	RC8-TN0073-150900-011-A12 TN0073 Homo sapiens cDNA
10656	23347	36584	7.85	7.0E-50	A1872137.1	EST_HUMAN	nc58612.s1 NCI_CGAP_Cc9 Homo sapiens cDNA clone IMAGE:1148206 3' similar to gb:X66391 80S
4309	17048		0.88	6.0E-50	BE794381.1	EST_HUMAN	RIBOSOMAL PROTEIN L6 (HUMAN);
8112	20806		5.67	6.0E-50	BE044076.1	EST_HUMAN	wm55g11.x1 NCI_CGAP_U12 Homo sapiens cDNA clone IMAGE:2439908 3'
10717	23403	36846	12.6	6.0E-50	AA312079.1	EST_HUMAN	601689565F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3643577 5'
10717	23406	36847	12.6	6.0E-50	AA312079.1	EST_HUMAN	nc36p04.x1 NCI_CGAP_U11 Homo sapiens cDNA clone IMAGE:3039511 3' similar to contains MER28.b3
1785	14528	27233	1.1	5.0E-50	BF332838.1	EST_HUMAN	MER28 repetitive element;
1785	14528	27234	1.1	5.0E-50	BF332838.1	EST_HUMAN	EST182775 Jurkat T-cells V1 Homo sapiens cDNA 5' end
8900	21690		5.26	5.0E-50	AA657983.1	EST_HUMAN	EST182775 Jurkat T-cells V1 Homo sapiens cDNA 5' end
887	13685		1.71	4.0E-50	AA801143.1	EST_HUMAN	CM0-BT0792-300500-398-b05 BT0792 Homo sapiens cDNA
3441	16197	28847	0.99	4.0E-50	AL163248.2	NT	CM0-BT0792-300500-398-b05 BT0792 Homo sapiens cDNA
6298	19041	32018	0.98	4.0E-50	11440683	NT	repetitive element;
7135	19822	32866	1.95	4.0E-50	BE087536.1	EST_HUMAN	nc54e09.s1 NCI_CGAP_SS1 Homo sapiens cDNA clone IMAGE:1104520 3' similar to gb:X53741_ma1
1831	14687		4.13	3.0E-50	M18048.1	NT	FIBULIN-1, ISOFORM A PRECURSOR (HUMAN);
3293	16054	28703	1.24	3.0E-50	AA746142.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C048
3734	16487	29124	1.14	3.0E-50	AW755254.1	EST_HUMAN	Homo sapiens cysteine-RNA synthetase (CARS), mRNA
							QV1-BT0681-280300-127-412 BT0681 Homo sapiens cDNA
							Human endogenous retrovirus RTVL-H2
							db03f06.s1 NCI_CGAP_Kd3 Homo sapiens cDNA clone IMAGE:1322627 3'
							CMYA5 Human cardiac muscle expression library Homo sapiens cDNA clone 4151636 similar to CMYA5
							Cardiomyopathy associated gene 5

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6867	19584	32618	1.52	3.0E-50	11421514	NT	Homo sapiens similar to serine domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3A (H. sapiens) (LOC833232), mRNA
7544	20214	33314	4.85	3.0E-50	AF233436.2	NT	Homo sapiens FYVE domain-containing dual specificity protein phosphatase FYVE-DSP1a mRNA, complete cds
7544	20214	33315	4.85	3.0E-50	AF233436.2	NT	Homo sapiens FYVE domain-containing dual specificity protein phosphatase FYVE-DSP1a mRNA, complete cds
8481	21173	34318	0.71	3.0E-50	6601589	NT	Homo sapiens ankyrin-like with transmembrane domains 1 (ANKTM1), mRNA
9718	22368	35567	1.21	3.0E-50	AB046818.1	NT	Homo sapiens mRNA for KIAA1598 protein, partial cds
9727	22378	35580	0.99	3.0E-50	11418514	NT	Homo sapiens t-complex 10 (a murine top homolog) (TCP10), mRNA
10077	22725	35942	0.47	3.0E-50	Y18278.1	NT	Mus musculus mRNA for neurobeclin
10415	23061	36280	1.03	3.0E-50	AB002287.1	NT	Human mRNA for KIAA0289 gene, partial cds
11045	23715	36984	1.61	3.0E-50	11436955	NT	Homo sapiens Grib2-associated binder 2 (KIAA0571), mRNA
11441	23208	38439	5.35	3.0E-50	AJ245821.1	NT	Homo sapiens CTL2 gene
760	13532		5.38	2.0E-50	AF055086.1	NT	Homo sapiens MHC class 1 region
1057	13615	28478	5.57	2.0E-50	4557752	NT	Homo sapiens midline 1 (Opitz/BBB syndrome) (MID1), mRNA
1424	14171	28857	2.25	2.0E-50	AF138303.1	NT	Homo sapiens decorin D mRNA, complete cds, alternatively spliced
6769	19513	32539	0.59	2.0E-50	AJ124065.1	EST_HUMAN	AJ124065 NT2RM2 Homo sapiens cDNA clone NT2RM2001608 5'
8215	20809	34044	1.02	2.0E-50	AB038182.1	NT	Homo sapiens TFF gene cluster for trefoil factor, complete cds
8215	20909	34045	1.02	2.0E-50	AB038182.1	NT	Homo sapiens TFF gene cluster for trefoil factor, complete cds
8355	21048	34186	10.04	2.0E-50	X06956.1	NT	Human HALPHA44 gene for alpha-tubulin, exons 1-3
8355	21048	34187	10.04	2.0E-50	X06956.1	NT	Human HALPHA44 gene for alpha-tubulin, exons 1-3
9784	22435	35641	1.51	2.0E-50	9910293	NT	Mus musculus keratin complex 2, gene 6g (Krt2-6g), mRNA
9784	22435	35642	1.51	2.0E-50	9910293	NT	Mus musculus keratin complex 2, gene 6g (Krt2-6g), mRNA
11680	24256		1.8	2.0E-50	AF023881.1	NT	Mus musculus cyclophilin A mRNA, complete cds
448	13235	25874	1.92	1.0E-50	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
2365	15087		9.48	1.0E-50	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region, segment 1/2
10093	22741	35858	1.57	1.0E-50	D11078.1	NT	Homo sapiens RGH2 gene, retrovirus-like element
5893	18678	31624	1.21	9.0E-51	AW511225.1	EST_HUMAN	h44602.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2812378 3' similar to TR:085636
6130	18908	31876	0.71	9.0E-51	AA744637.1	EST_HUMAN	O85636 CAMP-REGULATED GUANINE NUCLEOTIDE EXCHANGE FACTOR II ; my67n03 at NC1_OGAP_GCB1 Homo sapiens cDNA clone IMAGE:1283381 3'
8572	21284	34403	0.65	9.0E-51	AJ791154.1	EST_HUMAN	ab23g04.x5 Strategene lung (#637210) Homo sapiens cDNA clone IMAGE:841086 3' similar to SW:PSM_HUMAN_Q04009 PROSTATE-SPECIFIC MEMBRANE ANTIGEN ;
9224	21803	35075	1.23	9.0E-51	AA043738.1	EST_HUMAN	z651c09.r1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:486352 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9400	22082	35231	0.88	9.0E-51	AI791154.1	EST_HUMAN	ab23g04.x5 Stratagene lung (#337210) Homo sapiens cDNA clone IMAGE:841688 3' similar to SW:PSM_HUMAN Q04609 PROSTATE-SPECIFIC MEMBRANE ANTIGEN;
9400	22082	35232	0.88	9.0E-51	AI791154.1	EST_HUMAN	ab23g04.x5 Stratagene lung (#337210) Homo sapiens cDNA clone IMAGE:841688 3' similar to SW:PSM_HUMAN Q04609 PROSTATE-SPECIFIC MEMBRANE ANTIGEN;
11455	23222	36458	1.89	9.0E-51	H89078.1	EST_HUMAN	SW:PSM_HUMAN Q04609 PROSTATE-SPECIFIC MEMBRANE ANTIGEN;
11455	23222	36457	1.89	9.0E-51	H89078.1	EST_HUMAN	yw24g06.J1 Morton Fetal Cochlea Homo sapiens cDNA clone IMAGE:253210 5'
11823	18008	31878	1.43	9.0E-51	AA744837.1	EST_HUMAN	yw24g06.J1 Morton Fetal Cochlea Homo sapiens cDNA clone IMAGE:253210 5'
4405	17142	29770	1.45	8.0E-51	4503932	NT	my67h03.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1283381 3'
4405	17142	29771	1.45	8.0E-51	4503932	NT	Homo sapiens glycine amidinotransferase (L-arginine:glycine amidinotransferase) (GATM) mRNA
4530	17285	29898	8.43	8.0E-51	AA610842.1	EST_HUMAN	Homo sapiens glycine amidinotransferase (L-arginine:glycine amidinotransferase) (GATM) mRNA
7552	20222	33325	2.24	8.0E-51	11439587	NT	Homo sapiens glycine amidinotransferase (L-arginine:glycine amidinotransferase) (GATM) mRNA
9084	21939		1.13	8.0E-51	AU138590.1	EST_HUMAN	HP8809.s1 NCI_CGAP_Lu1 Homo sapiens cDNA clone IMAGE:1142440 3' similar to gb:X12871_mai1 HETEROGENEOUS NUCLEAR RIBONUCLEOPROTEIN A1 (HUMAN);
11812	20222	33325	2.02	8.0E-51	11439587	NT	Homo sapiens PDZ-73 protein (PDZ-73NY-CO-38), mRNA
3015	15781	28430	0.9	7.0E-51	AW274720.1	EST_HUMAN	AU138590 PLACE1 Homo sapiens cDNA clone PLACE1008887 5'
3278	16037	28887	1.45	7.0E-51	AW889219.1	EST_HUMAN	Homo sapiens PDZ-73 protein (PDZ-73NY-CO-38), mRNA
4148	16888	29518	1.37	7.0E-51	AL079628.1	EST_HUMAN	Q92340 A TYPICAL PKC SPECIFIC BINDING PROTEIN;
4148	16888	29520	1.37	7.0E-51	AL079628.1	EST_HUMAN	QV4-NT0028-200400-180-405 NT0028 Homo sapiens cDNA
4318	17057	29881	2.71	7.0E-51	AW295603.1	EST_HUMAN	DKFZp434B2229_j1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434B2229 5'
11688	24281	37603	1.34	7.0E-51	AF161449.1	NT	DKFZp434B2229_j1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434B2229 5'
1972	14708	27426	4.86	6.0E-51		NT	UI-H-BW0-4ip-b-05-0-U1.s1 NCI_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:2729817 3'
3486	18222	28878	14.73	6.0E-51	7657288	NT	Homo sapiens HSPC331 mRNA, partial cds
5901	18696	31634	1.56	6.0E-51	X01788.1	NT	Homo sapiens KIAA0929 protein Mix2 interacting nuclear target (MINT) homolog (KIAA0929), mRNA
5912	18696	31648	9.95	6.0E-51	AF070083.1	NT	Homo sapiens KIAA0929 protein Mix2 interacting nuclear target (MINT) homolog (KIAA0929), mRNA
5912	18696	31649	9.95	6.0E-51	AF070083.1	NT	Human haptoglobin related (Hpr) gene exon 3
6663	18280	32815	1.02	6.0E-51	4506736	NT	Homo sapiens mitogen-activated protein kinase kinase 1 (MKK4) gene, exon 4
6792	19538	32584	0.97	6.0E-51	11416761	NT	Homo sapiens mitogen-activated protein kinase kinase 1 (MKK4) gene, exon 4
6888	17945	30540	2.2	6.0E-51	11428685	NT	Homo sapiens mitogen-activated protein kinase kinase 1 (MKK4) gene, exon 4
9035	21725	34878	0.88	6.0E-51	11428625	NT	Homo sapiens ribosomal protein S6 kinase, 70kD, polypeptide 1 (RPS6KB1) mRNA
9035	21725	34879	0.88	6.0E-51	11428625	NT	Homo sapiens non-kinase Cdc42 effector protein SPEC2 (LOC56980), mRNA
9682	22235	35419	2.18	6.0E-51	7661535	NT	Homo sapiens cerebral cell adhesion molecule (LOC51148), mRNA



Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9662	22314	35511	0.67	6.0E-51	U50093.1	NT	Human ankyrin (ANK1) gene, exon 2
11221	23884	37169	1.51	6.0E-51	11526289	NT	Homo sapiens Interleukin 17 receptor (IL17R), mRNA
11515	24115	37425	1.52	6.0E-51	5453949	NT	Homo sapiens protein phosphatase 2, regulatory subunit B (B56), alpha isoform (PPP2R5A) mRNA
11515	24115	37428	1.52	6.0E-51	5453949	NT	Homo sapiens protein phosphatase 2, regulatory subunit B (B56), alpha isoform (PPP2R5A) mRNA
774	13546	26207	11.81	5.0E-51	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
785	13557	26219	1.98	5.0E-51	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
970	15557	26400	0.95	5.0E-51	AL133204.1	NT	Novel human gene mapping to chromosome X
1603	14349	27038	0.99	5.0E-51	5031980	NT	Homo sapiens 26S proteasome-associated pad1 homolog (POH1) mRNA
2001	15315	28052	8.67	5.0E-51	AJ007598.1	NT	Homo sapiens mRNA for nucleoporin 155
3925	16875	29316	1.52	5.0E-51	M30938.1	NT	Human Ku (p70/p80) subunit mRNA, complete cds
3925	16875	29317	1.52	5.0E-51	M30938.1	NT	Human Ku (p70/p80) subunit mRNA, complete cds
11249	23911	37203	4.18	5.0E-51	5803136	NT	Homo sapiens RNA binding motif protein 3 (RBM3), mRNA
1163	13908	29571	3.65	3.0E-51	AI587348.1	EST_HUMAN	trt1c08.x1 NCI_CGAP_Pair1 Homo sapiens cDNA clone IMAGE:2224720 3' similar to gb:M26328
4292	17031	29659	1.97	3.0E-51	AL159142.1	NT	KERATIN, TYPE I CYTOSKELETAL 18 (HUMAN); Novel human gene mapping to chromosome 22
7479	20152	33246	3	3.0E-51	R15914.1	EST_HUMAN	ye47c08.r1 Soares Infant brain 1N1B Homo sapiens cDNA clone IMAGE:53233 5' similar to gb:M14123_cds4
8738	21430		4.86	3.0E-51	M29063.1	NT	RETROVIRUS-RELATED POLYPROTEIN (HUMAN); contains LTR5 repetitive element;
8868	25430		0.47	3.0E-51	AW58377.1	EST_HUMAN	Human hnRNP C2 protein mRNA
357	13156	25796	2.01	2.0E-51	4507798	NT	Is0400.y1 Human Pancreatic islets Homo sapiens cDNA 5'
1683	14427	27124	5.16	2.0E-51	AA233352.1	EST_HUMAN	Homo sapiens ubiquitin protein ligase E3A (human papilloma virus E6-associated protein, Angelman syndrome) (UBE3A) mRNA
3716	16469	28107	1.57	2.0E-51	AI492415.1	EST_HUMAN	z30a05.r1 Striatum NT2 neuronal precursor 937230 Homo sapiens cDNA clone IMAGE:664880 5' similar to TR:G233228 G233228 RTVL-H PROTEIN. contains LTR7.3 LTR7 repetitive element;
4458	17194	29820	0.76	2.0E-51	AW137826.1	EST_HUMAN	h27g03.x1 NCI_CGAP_Kd11 Homo sapiens cDNA clone IMAGE:2131732 3'
5352	18155	30837	0.7	2.0E-51	AI732851.1	EST_HUMAN	U1-H-B11-edf-d-02-Q-JL1.1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2716851 3'
5352	18155	30838	0.7	2.0E-51	AI732851.1	EST_HUMAN	cd34f09.x5 NCI_CGAP_Kid5 Homo sapiens cDNA clone IMAGE:1325609 3' similar to SW:NME1_MOUSE
5925	18709	31663	3.66	2.0E-51	BE782015.1	EST_HUMAN	P35436 GLUTAMATE [NM2A] RECEPTOR SUBUNIT EPSILON 1 PRECURSOR;
7209	19894		0.61	2.0E-51	AF21927.1	NT	cd34f09.x6 NCI_CGAP_Kid5 Homo sapiens cDNA clone IMAGE:1325609 3' similar to SW:NME1_MOUSE
							P35436 GLUTAMATE [NM2A] RECEPTOR SUBUNIT EPSILON 1 PRECURSOR;
							601470446F1 NIH_MGC_87 Homo sapiens cDNA clone IMAGE:3873563 5'
							Homo sapiens diacylglycerol kinase iota (DGKI) gene, exon 23

Table 4  
Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7357	20038	33116	1.06	2.0E-51	7602349	NT	Homo sapiens cell recognition molecule Caspr2 (KIAA0868), mRNA
8569	21291	34432	1.72	2.0E-51	BE901894.1	EST_HUMAN	601676787F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3956613 5'
8569	21291	34433	1.72	2.0E-51	BE901894.1	EST_HUMAN	601676787F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3956613 5'
8932	21623	34766	0.06	2.0E-51	11037094	NT	Homo sapiens disrupted in schizophrenia 1 (DISC1), mRNA
9412	22090	35281	1.45	2.0E-51	A817076.1	EST_HUMAN	1274407.x1 NCI_CGAP_G08 Homo sapiens cDNA clone IMAGE:2238880 3' similar to SW:TRKC_HUMAN
9503	22156	35336	5.88	2.0E-51	BE166980.1	EST_HUMAN	Q16288 NT-3 GROWTH FACTOR RECEPTOR PRECURSOR ;
9519	22172	35356	0.8	2.0E-51	AB007926.1	NT	MR3-HT0487-150200-113-g01 HT0487 Homo sapiens cDNA
10332	22979	36199	1.77	2.0E-51	AV682474.1	EST_HUMAN	Homo sapiens mRNA for KIAA0457 protein, partial cds
10370	23016	36232	2.87	2.0E-51	AA378559.1	EST_HUMAN	AV682474 GKB Homo sapiens cDNA clone GKBAGF05 5'
11298	18155	30837	8.82	2.0E-51	A1732851.1	EST_HUMAN	EST191296 Synovial sarcoma Homo sapiens cDNA 5' end
11298	18155	30838	8.82	2.0E-51	A1732851.1	EST_HUMAN	cd34f08.x5 NCI_CGAP_Kid5 Homo sapiens cDNA clone IMAGE:1325609 3' similar to SW:NME1_MOUSE
12523	24870	31017	2.1	2.0E-51	11419159	NT	P35436 GLUTAMATE [NMDA] RECEPTOR SUBUNIT EPSILON 1 PRECURSOR ;
112	12934	25571	6.74	1.0E-51	4503528	NT	cd34f08.x5 NCI_CGAP_Kid5 Homo sapiens cDNA clone IMAGE:1325609 3' similar to SW:NME1_MOUSE
1479	14226		20.32	1.0E-51	AV742248.1	EST_HUMAN	P35436 GLUTAMATE [NMDA] RECEPTOR SUBUNIT EPSILON 1 PRECURSOR ;
4959	17684	30294	1.82	1.0E-51	BE779039.1	EST_HUMAN	Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (trithorax (Drosophila) homolog); translocated to, 4 (MLL1), mRNA
5305	18110	30768	4.1	1.0E-51	T18862.1	EST_HUMAN	Homo sapiens eukaryotic translation initiation factor 4A, isoform 1 (EIF4A1) mRNA
7549	20219	33322	0.94	1.0E-51	A1572532.1	EST_HUMAN	AV742248 G8 Homo sapiens cDNA clone CBFBC12 5'
7803	20498	33619	0.81	1.0E-51	BF434359.1	EST_HUMAN	601464695F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3868246 5'
11783	25434		2	1.0E-51	AV780590.1	EST_HUMAN	b120561 Testis 1 Homo sapiens cDNA clone b120561
10587	23282	36520	1.39	9.0E-52	R91638.1	EST_HUMAN	1639g02.x1 Soares_NHMPu_S1 Homo sapiens cDNA clone IMAGE:2089108 3'
10587	23282	36521	1.39	9.0E-52	R91638.1	EST_HUMAN	7686002.x1 NCI_CGAP_Ov18 Homo sapiens cDNA clone IMAGE:3644091 3' similar to TR:P87802 P87802
12301	24726		5.36	9.0E-52	AA77621.1	EST_HUMAN	PROTEASE ;
148	12963	25605	9.99	8.0E-52	AA720574.1	EST_HUMAN	AV780590 MDS Homo sapiens cDNA clone MDS38B02 5'
1482	14229	26915	1.65	8.0E-52	X84900.1	NT	y410404.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:196567 5' similar to SP:YGAF_ECOLI_P37339 HYPOTHETICAL PROTEIN IN GABP 3 REGION ;
							y410404.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:196567 5' similar to SP:YGAF_ECOLI_P37339 HYPOTHETICAL PROTEIN IN GABP 3 REGION ;
							265607.s1 Soares fetal liver spleen 1NFLS_S1 Homo sapiens cDNA clone IMAGE:448500 3' similar to contains THR.3 THR repetitive element ;
							1W21G02.s1 NCI_CGAP_G080 Homo sapiens cDNA clone IMAGE:1241138 3' similar to contains THR.3 THR repetitive element ;
							H.sapiens mRNA for laminin-5, alpha3b chain

Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1650	14398	27085	3.13	8.0E-52	11988028	NT	Homo sapiens hypothetical protein FLJ13556 similar to N-myc downstream regulated 3 (FLJ13556), mRNA
1650	14398	27086	3.13	8.0E-52	11988028	NT	Homo sapiens hypothetical protein FLJ13556 similar to N-myc downstream regulated 3 (FLJ13556), mRNA
3976	14398	27085	6.6	8.0E-52	11988028	NT	Homo sapiens hypothetical protein FLJ13556 similar to N-myc downstream regulated 3 (FLJ13556), mRNA
3976	14398	27086	6.6	8.0E-52	11988028	NT	Homo sapiens hypothetical protein FLJ13556 similar to N-myc downstream regulated 3 (FLJ13556), mRNA
7417	20094	33178	0.67	8.0E-52	11416585	NT	Homo sapiens transforming growth factor, beta-induced, 68kD (TGFB1), mRNA
7417	20094	33179	0.67	8.0E-52	11416585	NT	Homo sapiens transforming growth factor, beta-induced, 68kD (TGFB1), mRNA
8911	21602	34745	2.04	7.0E-52	W56471.1	EST_HUMAN	z58a06.1 Soares_papillary tumor_NbHPA Homo sapiens cDNA clone IMAGE:328578 5' similar to contains Alu repetitive element
1184	13918		0.76	6.0E-52	BE072409.1	EST_HUMAN	QV3-BT0537-271299-Q49-807 BT0637 Homo sapiens cDNA
1689	14433	27128	4.27	6.0E-52	AF108807.1	NT	Homo sapiens S164 gene, partial cds; PS1 and hypothetical protein genes, complete cds; and S171 gene, partial cds
5641	18438	31348	0.86	6.0E-52	AJ208794.1	EST_HUMAN	cg44f04.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1838047 3'
11170	23837	37119	1.84	6.0E-52	BE048172.1	EST_HUMAN	tz46f04.y1 NCL CGAP Brn52 Homo sapiens cDNA clone IMAGE:2291671 5' similar to SW:PGBM_MOUSE Q05793 BASEMENT MEMBRANE-SPECIFIC HEPARAN SULFATE
9292	21959	35132	0.6	5.0E-52	11437386	NT	PROTEOGLYCAN CORE PROTEIN PRECURSOR; Homo sapiens FSHD region gene 1 (FRG1), mRNA
1723	14486	27185	1.32	4.0E-52	4501822	NT	Homo sapiens adenylate cyclase activating polypeptide 1 (pituitary) receptor type 1 (ADCYAP1R1) mRNA
1780	14521	27226	1.02	4.0E-52	4758843	NT	Homo sapiens nucleoporin 158kD (NUP155) mRNA
3908	18858	29287	0.99	4.0E-52	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
5204	18012	30633	1.33	4.0E-52	4506132	NT	Homo sapiens phosphoribosyl pyrophosphate synthetase-associated protein 2 (PRPSAP2) mRNA
5204	18012	30634	1.33	4.0E-52	4506132	NT	Homo sapiens phosphoribosyl pyrophosphate synthetase-associated protein 2 (PRPSAP2) mRNA
7898	20633	33760	1.74	4.0E-52	BE922032.1	EST_HUMAN	601440887F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3915836 5'
8432	21125	34263	5.48	4.0E-52	11417035	NT	Homo sapiens hydroxysteroid (17-beta) dehydrogenase 4 (HSD17B4), mRNA
12143	24631		5.11	4.0E-52	11418177	NT	Homo sapiens Ran GTPase activating protein 1 (RANGAP1), mRNA
12627	24930		5.23	4.0E-52	AB002059.1	NT	Homo sapiens DNA for Human P2XM, complete cds
4071	16815		10.57	3.0E-52	11437042	NT	Homo sapiens hypothetical protein FLJ10975 (FLJ10975), mRNA
549	13332	25062	2.88	2.0E-52	M10678.1	NT	Human endogenous retroviral DNA (4-1), complete retroviral segment
549	13332	25063	2.88	2.0E-52	M10678.1	NT	Human endogenous retroviral DNA (4-1), complete retroviral segment

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLASTE Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2503	15220	27983	2.04	2.0E-52	BE207575.1	EST_HUMAN	b66807.y1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3030421 5' similar to gb.X16483 M.musculus mRNA for Zfp-1 zinc finger protein (MOUSE);
2740	15448		6.03	2.0E-52	BF677892.1	EST_HUMAN	602084710F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4248881 5'
4020	17648	30280	2.13	2.0E-52	AI137188.3	NT	Novel human gene mapping to chromosome 20, similar to membrane transporters
4952	17678	30287	1.29	2.0E-52	AI141802.1	EST_HUMAN	qs56605.s1 Scores_NH-MP_u_S1 Homo sapiens cDNA clone IMAGE:1690784 3'
4952	17678	30288	1.29	2.0E-52	AI141802.1	EST_HUMAN	qs56605.s1 Scores_NH-MP_u_S1 Homo sapiens cDNA clone IMAGE:1690784 3'
5617	18413	31326	4.11	2.0E-52	AW848041.1	EST_HUMAN	IL3-CT0214-231289-053-E12 CT0214 Homo sapiens cDNA
6274	19047	32024	1.96	2.0E-52	11141868	NT	Homo sapiens Interleukin 21 receptor (IL21R), mRNA
6613	19376	32390	0.89	2.0E-52	AB029004.1	NT	Homo sapiens mRNA for KIAA1081 protein, partial cds
6843	19543	32571	1.17	2.0E-52	AI792146.1	EST_HUMAN	ce45d12.y5 NCI_CGAP_B12 Homo sapiens cDNA clone IMAGE:1608311 6'
8551	21243		9.03	2.0E-52	AF147880.1	NT	Macaca mulatta beta-tubulin mRNA, complete cds
8834	21528	34672	0.81	2.0E-52	AA778795.1	EST_HUMAN	z45g05.s1 Scores_fetal_liver_spleen_INFLS_S1 Homo sapiens cDNA clone IMAGE:453272 3'
8979	21954		0.86	2.0E-52	4796798	NT	Homo sapiens NADH dehydrogenase (ubiquinone) Fe-S protein 5 (15kD) (NADH-coenzyme Q reductase) (NDUFS5) mRNA
10015	22663	35879	5.53	2.0E-52	5730038	NT	Homo sapiens SET domain and mariner transposase fusion gene (SETMAR) mRNA
10016	22663	36880	5.53	2.0E-52	5730038	NT	Homo sapiens SET domain and mariner transposase fusion gene (SETMAR) mRNA
11165	23832	37111	3.15	2.0E-52	AI831462.1	EST_HUMAN	w49c04.x1 NCI_CGAP_Lu19 Homo sapiens cDNA clone IMAGE:2406150 3' similar to contains THR.b2 THR repetitive element;
11165	23832	37112	3.15	2.0E-52	AI831462.1	EST_HUMAN	w49c04.x1 NCI_CGAP_Lu19 Homo sapiens cDNA clone IMAGE:2406150 3' similar to contains THR.b2 THR repetitive element;
11178	23845	37131	3.09	2.0E-52	AV715377	EST_HUMAN	AV715377 DGB Homo sapiens cDNA clone DGBAIE03 5'
11325	24016		1.72	2.0E-52	W70280.1	EST_HUMAN	z449g12.r1 Scores_fetal_heart_NchH19W Homo sapiens cDNA clone IMAGE:344038 5'
11618	24215		2.76	2.0E-52	11417990	NT	Homo sapiens LIM domain kinase 2 (LIMK2), mRNA
11961	25408	30601	24.36	2.0E-52	AW238297.1	EST_HUMAN	xn72a07.x1 NCI_CGAP_CML1 Homo sapiens cDNA clone IMAGE:2700036 3' similar to contains Alu repetitive element; contains element LTR2 repetitive element;
12350	24758		4.49	2.0E-52	AI809865.1	EST_HUMAN	wf67d05.x1 Scores_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2360649 3' similar to TR:Q18859 Q18859 CARBOXYLESTERASE;
520	13304	25937	1.96	1.0E-52	AA634445.1	EST_HUMAN	zu75h12.s1 Scores_testis_NHT Homo sapiens cDNA clone IMAGE:743879 3'
1350	14068	26773	37.84	1.0E-52	4504028	NT	Homo sapiens glutamate-aminoligase (glutamine synthase) (GLUL) mRNA
2537	15252		0.9	1.0E-52	4502238	NT	Homo sapiens arylsulfatase D (ARSD), transcript variant 1, mRNA
3055	15821	28485	2.87	1.0E-52	S61070.1	NT	polymerase transcriptase homolog (retroviral element) [human, endogenous retroviral element RTVL-Hp1, Genomic, 660 nt]
5250	18056	30684	4.35	1.0E-52	M29426.1	NT	Human P-glycoprotein (MDR1) gene, exon 4
6300	19073	32059	2.51	1.0E-52	U39964.1	NT	Human PMS2 related (hPMSR2) gene, complete cds

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7330	20012	33080	5.31	1.0E-52	X07292.1	NT	Human aldolase C gene for fructose-1,6-bisphosphate aldolase
8364	21057		1.2	1.0E-52	AL163227.2	NT	Homo sapiens chromosome 21 segment HS21C027
8087	21776	34940	0.75	1.0E-52	AF078779.1	NT	Rattus norvegicus putative four repeat ion channel mRNA, complete cds
10478	23122		1.03	1.0E-52	AW020370.1	EST_HUMAN	df08g05.y1 Morton Fetal Cochlea Homo sapiens cDNA clone IMAGE:2483145 5'
10486	23132		1.39	1.0E-52	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
10665	23356	36506	1.61	1.0E-52	U48296.1	NT	Homo sapiens protein tyrosine phosphatase PTPCAAX1 (hPTPCAAX1) mRNA, complete cds
10740	23427		2.09	1.0E-52	11426321	NT	Homo sapiens proteasome (prosome, macropain) subunit, beta type, 2 (PSMB2), mRNA
3771	16523	29181	1.05	9.0E-53	4506064	NT	Homo sapiens protein kinase, cAMP-dependent, regulatory, type II, beta (PRKAR2B) mRNA
4359	17007	29732	1.96	9.0E-53	AF001446.1	NT	Homo sapiens core binding factor alpha1 subunit (CBFA1) gene, exon 3
12189	24680		3.18	7.0E-53	BF238465.1	EST_HUMAN	601804771F1 NIH_MGC_54 Homo sapiens cDNA clone IMAGE:4132793 5'
12600	25285		4.92	7.0E-53	AI421782.1	EST_HUMAN	144807.x1 NCI_CGAP_Brr23 Homo sapiens cDNA clone IMAGE:2089077 3' similar to contains THR.11
5096	17805	30422	1.02	6.0E-53	BE295719.1	EST_HUMAN	601175778F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3630948 5'
4078	16822	29448	2.28	5.0E-53	4758543	NT	Homo sapiens heterogeneous nuclear ribonucleoprotein C (C1/C2) (HNRPC) mRNA
12236	24688		1.58	5.0E-53	AW813563.1	EST_HUMAN	RC3-ST0197-151088-011-g10 ST0197 Homo sapiens cDNA
48	12877	25502	2.76	4.0E-53	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
48	12877	25503	2.76	4.0E-53	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
4771	17503	30125	1.03	4.0E-53	7705414	NT	Homo sapiens hook1 protein (HOOK1), mRNA
9316	21983		0.68	4.0E-53	AI613037.1	EST_HUMAN	Y06h04.x1 NCI_CGAP_U83 Homo sapiens cDNA clone IMAGE:2278327 3'
9656	22308		0.67	4.0E-53	F13090.1	EST_HUMAN	HSC3ID041 normalized infant brain cDNA Homo sapiens cDNA clone c-3id04
11175	23842	37126	2.78	4.0E-53	BF128701.1	EST_HUMAN	601810889F1 NIH_MGC_48 Homo sapiens cDNA clone IMAGE:4033977 5'
11175	23842	37127	2.78	4.0E-53	BF128701.1	EST_HUMAN	601810889F1 NIH_MGC_48 Homo sapiens cDNA clone IMAGE:4033977 5'
2865	15375	28114	1.77	3.0E-53	AB028898.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
4549	17294	29914	0.74	3.0E-53	AW803593.1	EST_HUMAN	IL2-UM0081-240300-055-D03 UM0081 Homo sapiens cDNA
5339	18142	30803	0.7	3.0E-53	AF001212.1	NT	Homo sapiens 28S proteasome subunit 9 mRNA, complete cds
5336	18336	31243	0.62	3.0E-53	11826287	NT	Homo sapiens MIL1 protein (MIL1), mRNA
6101	18879	31846	0.85	3.0E-53	BE160025.1	EST_HUMAN	QV1-HT0412-280300-123-c04 HT0412 Homo sapiens cDNA
6998	19690	32740	1.04	3.0E-53	Y10398.3	NT	H. sapiens gdf gene
6998	19690	32741	1.04	3.0E-53	Y10398.3	NT	H. sapiens gdf gene
8203	20867	34034	12.52	3.0E-53	S72043.1	NT	GIF-growth inhibitory factor [human, brain, Genomic, 2016 nt]
8758	21450	34567	0.65	3.0E-53	10835060	NT	Homo sapiens bone morphogenetic protein 5 (BMP5), mRNA
8955	21646		8.41	3.0E-53	5901953	NT	Homo sapiens FGFR1 oncogene partner (FOP), mRNA
11828	24410	37746	2.79	3.0E-53	8923599	NT	Homo sapiens hypothetical protein FLJ20644 (FLJ20644), mRNA

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
445	13231		5.82	2.0E-53	AA366558.1	EST_HUMAN	EST77525 Pancreas tumor III Homo sapiens cDNA 5' end
2327	15052	27788	2.79	2.0E-53	U78027.1	NT	Homo sapiens Bruton's tyrosine kinase (BTK), alpha-D-galactosidase A (GLA), L44-like ribosomal protein (L44L) and FTP3 (FTP3) genes, complete cds
2538	15253		8.73	2.0E-53	4502318	NT	Homo sapiens ATPase, H <sup>+</sup> transporting, lysosomal (vacuolar proton pump) 31kD; Vacuolar proton-ATPase, subunit E; V-ATPase, subunit E (ATP6E), mRNA
2729	15436	28172	1.48	2.0E-53	4757915	NT	Homo sapiens core-binding factor, runt domain, alpha subunit 2; translocated to; 1; cyclin D-related (CBFA2T1) mRNA
2729	15436	28173	1.48	2.0E-53	4757915	NT	Homo sapiens core-binding factor, runt domain, alpha subunit 2; translocated to; 1; cyclin D-related (CBFA2T1) mRNA
3239	18001	28651	3.72	2.0E-53	AF083822.1	NT	Homo sapiens dihydropyridine receptor alpha 2 subunit (CACNA2D1) gene, exon 6
4036	16781	29411	2.63	2.0E-53	M81873.1	NT	Human Krueppel-related DNA-binding protein (TF34) gene, partial cds
5340	18143	30804	2.67	2.0E-53	BF334740.1	EST_HUMAN	PM1-CT0396-170800-001-g03 CT0396 Homo sapiens cDNA
5340	18143	30805	2.67	2.0E-53	BF334740.1	EST_HUMAN	PM1-CT0396-170800-001-g03 CT0396 Homo sapiens cDNA
7770	20498	33560	1	2.0E-53	AW975598.1	EST_HUMAN	EST387707 MAGE sequences, MAGN Homo sapiens cDNA
9308	21975		3.82	2.0E-53	AW245676.1	EST_HUMAN	2822665.6 prime NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2822665 5'
1428	14175	26860	1.51	1.0E-53	AJ271736.1	NT	Homo sapiens Xq pseudautosomal region; segment 2/2
3404	16162	28813	1.08	1.0E-53	AB028898.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
6593	19366	32370	1.52	1.0E-53	BF364201.1	EST_HUMAN	GM4-NN1028-150800-543-e02 NN1028 Homo sapiens cDNA
7147	19834	32903	0.68	1.0E-53	BE012071.1	EST_HUMAN	RC5-BN1058-270400-031-D01 BN1058 Homo sapiens cDNA
7836	20531	33658	0.54	1.0E-53	AA246072.1	EST_HUMAN	ll6671.seq.F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA 5'
8987	21677	34826	5.91	1.0E-53	X79436.1	NT	H. sapiens mRNA for hRNPCore protein A1
11833	24417	37757	1.41	1.0E-53	X98411.1	NT	H. sapiens mRNA for myosin-II
11833	24417	37758	1.41	1.0E-53	X98411.1	NT	H. sapiens mRNA for myosin-II
11855	24507	37255	2.29	1.0E-53	AW245422.1	EST_HUMAN	2822943.3 prime NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2822943 3'
5219	25063	30951	6.16	9.0E-54	4506788	NT	Homo sapiens IQ motif containing GTPase activating protein 1 (IQGAP1) mRNA
202	13016	28655	2.4	8.0E-54	BE389785.1	EST_HUMAN	601272853F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3814031 5'
1827	14596	27278	1.77	8.0E-54	4504610	NT	Homo sapiens insulin-like growth factor 2 receptor (IGF2R) mRNA
5845	18633	31568	26.87	8.0E-54	6005700	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 8 (ABC8), mRNA
375	13200	25845	1.27	7.0E-54	AA812537.1	EST_HUMAN	at79c12.s1 Soares_testis_NHT Homo sapiens cDNA clone 1377046 3' similar to contains MER30.13 MER30 repetitive element;
1822	14561	27273	1.65	7.0E-54	Y16645.1	NT	Homo sapiens mRNA for monocyte chemoattractant protein-2
2202	14630	27687	6.38	7.0E-54	N27177.1	EST_HUMAN	yw8d12.s1 Soares_placenta_8to9weeks_2NkHP8to9W Homo sapiens cDNA clone IMAGE:257399 3' similar to contains LTR7.b3 LTR7 repetitive element;

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10028	22676	35992	2.08	7.0E-54	11417222	NT	Homo sapiens similar to nuclear factor related to kappa B binding protein (H. sapiens) (LOC83182), mRNA
11047	23717	36986	1.74	7.0E-54	8923698	NT	Homo sapiens golgin-like protein (GLP), mRNA
11047	23717	36987	1.74	7.0E-54	8923698	NT	Homo sapiens golgin-like protein (GLP), mRNA
11261	23923		4.35	7.0E-54	AI160189.1	EST_HUMAN	qb87g03.x1 Soares_fetal heart_NbHH19W Homo sapiens cDNA clone IMAGE:1705204 3' similar to contains OFR.H1 OFR repetitive element;
11811	24400	37738	1.49	7.0E-54	AF111187.2	NT	Homo sapiens jun dimerization protein gene, partial cds; cfos gene, complete cds; and unknown gene
11811	24400	37737	1.49	7.0E-54	AF111187.2	NT	Homo sapiens jun dimerization protein gene, partial cds; cfos gene, complete cds; and unknown gene
22	12850	26465	1.41	6.0E-54	AB003618.1	NT	Homo sapiens DNA for MICB, exon 4, 5 and partial cds
378	13201	25846	6.83	6.0E-54	8922148	NT	Homo sapiens hypothetical protein DKFZp434M035 (DKFZp434M035), mRNA
378	13201	25847	6.83	6.0E-54	8922148	NT	Homo sapiens hypothetical protein DKFZp434M035 (DKFZp434M035), mRNA
3277	16038	28688	0.77	6.0E-54	8922148	NT	Homo sapiens hypothetical protein DKFZp434M035 (DKFZp434M035), mRNA
3988	16734	29388	1.91	6.0E-54	8922148	NT	Homo sapiens hypothetical protein DKFZp434M035 (DKFZp434M035), mRNA
4429	17165	29794	0.86	6.0E-54	4502872	NT	Homo sapiens chloride channel 8 (CLCN8) mRNA
4792	17523	30145	1.78	6.0E-54	AV764746.1	EST_HUMAN	AV754746 TP Homo sapiens cDNA clone TPGAAC10 5'
4819	17550		1.15	6.0E-54	4505806	NT	Homo sapiens phosphatidylinositol 4-kinase, catalytic, alpha polypeptide (PIK4CA) mRNA
11432	23189	36430	1.51	6.0E-54	Y09846.1	NT	H. sapiens shc pseudogene, p86 isoform
2146	14878	27611	3.79	5.0E-54	AW813587.1	EST_HUMAN	RC3-ST0197-151089-011-f08 ST0197 Homo sapiens cDNA
178	12990		13.34	4.0E-54	P51523	SWISSPROT	ZINC FINGER PROTEIN 84 (ZINC FINGER PROTEIN HPF2)
					AF110103.1	NT	Tupala belangeri beta-actin mRNA, partial cds
636	13703	26368	57.5	4.0E-54	AA306764.1	EST_HUMAN	EST177696 Jurkat T-cells VI Homo sapiens cDNA 5' end similar to glyceraldehyde-3-phosphate dehydrogenase
1798	14538	27248	3.22	4.0E-54	D38521.1	NT	Human mRNA for KIAA0077 gene, partial cds
1798	14538	27249	3.22	4.0E-54	D38521.1	NT	Human mRNA for KIAA0077 gene, partial cds
3199	15962		1	4.0E-54	AB35086.1	EST_HUMAN	w026d11.x1 Soares_NFL_T_GBC ST Homo sapiens cDNA clone IMAGE:2329288 3' similar to TR:002711
82	12816	25555	4.47	3.0E-54	AA313487.1	EST_HUMAN	002711 PRO-POL-DUTPASE POLYPROTEIN;
1555	14312		0.91	3.0E-54	AW515742.1	EST_HUMAN	EST186371 Colon carcinoma (HCC) cell line Homo sapiens cDNA 5' end
2574	15288	28025	0.96	3.0E-54	AL110383.1	EST_HUMAN	hd87g08.x1 NCI CGAP GC6 Homo sapiens cDNA clone IMAGE:2916542 3'
2930	15342		1.34	3.0E-54	AB08757.1	EST_HUMAN	DKFZp434E0731_1 434 (synonym: hba3) Homo sapiens cDNA clone DKFZp434E0731 5'
5814	18903	31531	1.74	3.0E-54	4502434	NT	IL-BT189-180399-007 BT189 Homo sapiens cDNA
7288	19971	33048	2.1	3.0E-54	AA844081.1	EST_HUMAN	Homo sapiens BMX non-receptor tyrosine kinase (BMX) mRNA
7288	19971	33049	2.1	3.0E-54	AA844081.1	EST_HUMAN	ab2c08.st Soares_parathyroid_tumor_NbH-PA Homo sapiens cDNA clone IMAGE:1388270 3'
							ab2c08.st Soares_parathyroid_tumor_NbH-PA Homo sapiens cDNA clone IMAGE:1388270 3'

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10949	23627		1.63	3.0E-54	11434806	NT	Homo sapiens golgi autoantigen, golgi subfamily a, 5 (GOLGA5), mRNA
11024	23698	30859	4.93	3.0E-54	BF346600.1	EST_HUMAN	802010409F1 NCI_CGAP_Bm87 Homo sapiens cDNA clone IMAGE:4155121 5'
11341	24031	37335	3.26	3.0E-54	AA393382.1	EST_HUMAN	z170f12.f1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:72727 5' similar to TR:G191315
12056	24573	31119	2.98	3.0E-54	AW954559.1	EST_HUMAN	G191315 ANDROGEN-DEPENDENT EXPRESSED PROTEIN ;
12087	25373		2.51	3.0E-54	AW748966.1	EST_HUMAN	EST368829 MAGC resequencs, MAGC Homo sapiens cDNA
627	13408	26040	8.86	2.0E-54	5031800	NT	RC1-BT0313-131199-011-509 BT0313 Homo sapiens cDNA
1344	14092	26767	0.96	2.0E-54	4507164	NT	Homo sapiens killer cell lectin-like receptor subfamily G, member 1 (KLRG1), mRNA
							Homo sapiens nuclear antigen Sp100 (SP100) mRNA
1539	14288	26872	1.37	2.0E-54	AA655008.1	EST_HUMAN	m78a09.a1 NCI_CGAP_P13 Homo sapiens cDNA clone IMAGE:1204600 similar to contains element L1 repetitive element ;
2541	15285	27895	1.22	2.0E-54	AW183175.1	EST_HUMAN	au82g03.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2783784 5' similar to
2608	16320	28062	1.86	2.0E-54	AL163210.2	NT	SW:CU1.1_HUMAN Q13616 CULLIN HOMOLOG 1 ;
2896	15663	28311	1.52	2.0E-54	AW057824.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C010
3311	18071	28721	1.18	2.0E-54	AJ278314.1	NT	wy80b12.x1 Soares_NSF_F8_gw_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:2552927 3' similar to
							TR:Q62084 Q62084 PHOSPHOLIPASE C NEIGHBORING ;
							Homo sapiens mRNA for phospholipase C-beta-1b (PLCB1 gene)
3536	16292		3.2	2.0E-54	AA532925.1	EST_HUMAN	n145g09.a1 NCI_CGAP_P19 Homo sapiens cDNA clone IMAGE:995488 similar to gb:533777 60S
4181	16021		2.06	2.0E-54	4502842	NT	RIBOSOMAL PROTEIN L23 (HUMAN);
4826	17558	30178	1.02	2.0E-54	7706449	NT	Homo sapiens chaperonin containing T-complex subunit 6 (CCT6) mRNA
5388	18188	30890	1.84	2.0E-54	4759090	NT	Homo sapiens peptidylarginine deiminase type III (LOC51702), mRNA
5516	18314	31216	1.2	2.0E-54	BE047884.1	EST_HUMAN	Homo sapiens small inducible cytokine subfamily A (Cys-Cys), member 14 (SCYA14) mRNA
5875	18469	31386	5.04	2.0E-54	11426857	NT	Homo sapiens cDNA clone IMAGE:2291348 5'
5771	18562	31499	13.99	2.0E-54	AB046811.1	NT	tx43c11.y1 NCI_CGAP_Bm52 Homo sapiens cDNA clone IMAGE:2291348 5'
5771	18562	31490	13.99	2.0E-54	AB046811.1	NT	Homo sapiens KIAA0100 gene product (KIAA0100), mRNA
6559	18324	32331	0.88	2.0E-54	AF008815.1	NT	Homo sapiens mRNA for KIAA1591 protein, partial cds
6713	19628	32672	0.96	2.0E-54	AB023212.1	NT	Homo sapiens mRNA for KIAA1591 protein, partial cds
6713	19628	32673	0.96	2.0E-54	AB023212.1	NT	Homo sapiens EVI5 homolog mRNA, complete cds
							Homo sapiens mRNA for KIAA0905 protein, partial cds
							Homo sapiens mRNA for KIAA0905 protein, partial cds
							Homo sapiens neurofibromin 1 (neurofibromatosis, von Recklinghausen disease, Watson disease) (NF1), mRNA
7023	19715	32772	8.6	2.0E-54	11426544	NT	mRNA
9529	22182	35396	4.11	2.0E-54	AB01025.1	NT	Homo sapiens mRNA for brain ryanodine receptor, complete cds
9809	22558	35753	0.79	2.0E-54	11428427	NT	Homo sapiens Janus kinase 2 (a protein tyrosine kinase) (JAK2), mRNA
10021	22698	35885	1.01	2.0E-54	11416762	NT	Homo sapiens serologically defined colon cancer antigen 10 (SDCCAG10), mRNA
10021	22698	35886	1.01	2.0E-54	11416762	NT	Homo sapiens serologically defined colon cancer antigen 10 (SDCCAG10), mRNA



Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10947	19324	32331	1.57	2.0E-54	AF008915.1	NT	Homo sapiens EV15 homolog mRNA, complete cds
11727	24321		2.86	2.0E-54	7657454	NT	Homo sapiens pascadillo (zabrafish) homolog 1, containing BRCT domain (PES1), mRNA
4432	17188		1.22	1.0E-54	BF318418.1	EST_HUMAN	601899230F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4128535 5'
10153	22801	36018	0.52	1.0E-54	AA412409.1	EST_HUMAN	Zu10e08.f1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:731484 5'
10153	22801	36018	0.52	1.0E-54	AA412409.1	EST_HUMAN	Zu10e09.f1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:731484 5'
12710	24088		2.17	1.0E-54	AU077341.1	EST_HUMAN	AU077341 Sugeno cDNA library Homo sapiens cDNA clone Zv6C880 similar to 5'-end region of Human gamma-glutamyl transpeptidase mRNA, 5 and
10257	22905	36115	0.94	9.0E-55	BE081469.1	EST_HUMAN	QV2-BT0635-190400-143-112 BT0635 Homo sapiens cDNA
1282	14041		1.09	8.0E-55	Y07828.2	NT	Homo sapiens RFB30 gene for RING finger protein
1295	14044		2.63	8.0E-55	Y07828.2	NT	Homo sapiens RFB30 gene for RING finger protein
11151	23818		1.67	8.0E-55	AW408714.1	EST_HUMAN	Yf02a02.x1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:2860907 5'
1059	13817	28479	0.77	7.0E-55	R09346.1	EST_HUMAN	Yf28a04.f1 Soares fetal liver spleen 1N1FLS Homo sapiens cDNA clone IMAGE:127898 5' similar to SP-C561_BOVIN P10887 CYTOCHROME c;
8703	21395		0.8	7.0E-55	AW103839.1	EST_HUMAN	xd78c02.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2803522 3' similar to TR:060365
9080	21769	34932	1.28	7.0E-55	AA89581.1	EST_HUMAN	ak28a11.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1407260 3'
9116	21803	34988	2.16	7.0E-55	AU139609.1	EST_HUMAN	AU139609 PLACE1 Homo sapiens cDNA clone PLACE1011576 5'
11171	23838	37120	10.32	7.0E-55	AI661058.1	EST_HUMAN	tz29f09.x1 NCI_CGAP_UH1 Homo sapiens cDNA clone IMAGE:2210249 3'
11171	23838	37121	10.32	7.0E-55	AI661058.1	EST_HUMAN	tz29f09.x1 NCI_CGAP_UH1 Homo sapiens cDNA clone IMAGE:2210249 3'
12882	25303		2.5	7.0E-55	H23396.1	EST_HUMAN	ym57g07.f1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:52444 5'
11498	24089	37412	2.45	9.0E-55	AB040834.1	NT	Homo sapiens mRNA for KIAA1501 protein, partial cds
1763	14505	27205	1.19	5.0E-55	AA704971.1	EST_HUMAN	z95b09.s1 Soares_fetal_liver_spleen_1N1FLS_S1 Homo sapiens cDNA clone IMAGE:462617 3'
1763	14505	27206	1.19	5.0E-55	AA704971.1	EST_HUMAN	z95b09.s1 Soares_fetal_liver_spleen_1N1FLS_S1 Homo sapiens cDNA clone IMAGE:462617 3'
4720	17452	30086	1.81	5.0E-55	AW206021.1	EST_HUMAN	UH-HB11-efy-g-09-0-UJ.s1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2723536 3'
6446	18214	32211	1.85	5.0E-55	4502240	NT	Homo sapiens erythroid E (chondrocyte) punctata 1 (ARSE), mRNA
6446	18214	32212	1.85	5.0E-55	4502240	NT	Homo sapiens erythroid E (chondrocyte) punctata 1 (ARSE), mRNA
6568	25094	32340	1.34	5.0E-55	4505952	NT	Homo sapiens peroxanase 2 (PON2) mRNA, and translated products
6568	25094	32341	1.34	5.0E-55	4505952	NT	Homo sapiens peroxanase 2 (PON2) mRNA, and translated products
6937	19672	32718	0.83	5.0E-55	7382477	NT	Homo sapiens Rho GTPase activating protein 6 (ARHGAP6), transcript variant 5, mRNA
7195	19881	32955	0.7	5.0E-55	11434422	NT	Homo sapiens speckle-type POZ protein (SPOP), mRNA
7893	20588	33718	0.72	5.0E-55	11528491	NT	Homo sapiens BCL2-associated athanogene (BAG1), mRNA
8942	21633	34777	3.63	5.0E-55	4506302	NT	Homo sapiens protein tyrosine phosphatase, receptor type, alpha polypeptide (PTPRA) mRNA
9219	21898		1.75	5.0E-55	BE04388.1	EST_HUMAN	RC4-BT0310-110300-015-f10 BT0310 Homo sapiens cDNA
9937	22585	35796	1.77	5.0E-55	AB014511.1	NT	Homo sapiens mRNA for KIAA0611 protein, partial cds

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9037	22585	35787	1.77	5.0E-55	AB014511.1	NT	Homo sapiens mRNA for KIAA0811 protein, partial cds
10122	22770	35984	2.48	5.0E-55	5453785	NT	Homo sapiens ncl (chicken)-like 2 (NELL2), mRNA
12137	24626		2.73	5.0E-55	11417972	NT	Homo sapiens pscadillo (zebrafish) homolog 1, containing BRC domain (PES1), mRNA
667	13434	28076	65.4	4.0E-55	4826873	NT	Homo sapiens RNA binding motif protein, Y chromosome, family 1, member A1 (RBM1A1), mRNA
1421	14169	28853	1.78	4.0E-55	7661713	NT	Homo sapiens predicted osteoblast protein (GS3786), mRNA
1421	14169	28854	1.78	4.0E-55	7661713	NT	Homo sapiens predicted osteoblast protein (GS3786), mRNA
1504	14250		1.7	4.0E-55	BF081411.1	EST_HUMAN	7152b10.x1 Soarase_NSF_F8_PW_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3390043 3' similar to contains L1.13 L1 repetitive element;
2019	14754	27482	0.97	4.0E-55	4508180	NT	Homo sapiens proteasome (prosome, macropain) subunit, alpha type, 2 (PSMA2), mRNA
2019	14754	27483	0.97	4.0E-55	4508180	NT	Homo sapiens proteasome (prosome, macropain) subunit, alpha type, 2 (PSMA2), mRNA
2079	14811	27542	6.47	4.0E-55	4503314	NT	Homo sapiens diacylglycerol kinase, gamma (DGKG), mRNA
2079	14811	27543	8.47	4.0E-55	4503314	NT	Homo sapiens diacylglycerol kinase, gamma (DGKG), mRNA
2308	15033	27771	2.29	4.0E-55	4507794	NT	Homo sapiens ubiquitin-conjugating enzyme E2 variant 1 (UBE2V1), mRNA
2696	15310		1.21	4.0E-55	AJ271735.1	NT	Homo sapiens Xq pseudocentromere region; segment 1/2
8242	20936		8.37	4.0E-55	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
11194	23859		2.3	4.0E-55	W28188.1	EST_HUMAN	43c-5 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA
12057	24574		3.05	4.0E-55	BF303941.1	EST_HUMAN	60188575F2 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4120338 5'
11998	24538		1.5	3.0E-55	BE178519.1	EST_HUMAN	PM1-HT0603-090300-001-g08 HT0603 Homo sapiens cDNA
12721	24993		1.85	3.0E-55	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
368	13184	25807	1.98	2.0E-55	X57147.1	NT	Human endogenous retrovirus pHE.1 (ERV9)
538	13321		1.13	2.0E-55	M10976.1	NT	Human endogenous retroviral DNA (4-1), complete retroviral segment
634	13413	26049	13.79	2.0E-55	4507288	NT	Homo sapiens syntaxin-binding protein 1 (STXB1), mRNA, and translated products
4723	17456	30090	2.91	2.0E-55	BE719888.1	EST_HUMAN	CM1-HT0876-150800-357-g03 HT0876 Homo sapiens cDNA
7403	25113	33102	0.76	2.0E-55	AW501888.1	EST_HUMAN	UHLF-BN0-aka-f08-0-U1.r1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3078275 5'
8993	21654	34804	0.52	2.0E-55	BF224452.1	EST_HUMAN	hr76h08.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3134463 3'
8993	21654	34805	0.52	2.0E-55	BF224452.1	EST_HUMAN	hr76h08.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3134463 3'
9058	21747		6.23	2.0E-55	AJ002836.1	EST_HUMAN	am8h05.a1 Stratiogene schizo brain S11 Homo sapiens cDNA clone IMAGE:1684185 3' similar to contains THR.b2 THR repetitive element;
9140	21828		0.72	2.0E-55	BE007959.1	EST_HUMAN	QV0-BN0147-280400-213-g06 BN0147 Homo sapiens cDNA
10870	23550	36798	1.95	2.0E-55	AU119344.1	EST_HUMAN	AU119344 HEMBA1 Homo sapiens cDNA clone HEMBA1005593 5'
95	12921	25558	3.01	1.0E-55	4505080	NT	Homo sapiens mannose-6-phosphate receptor (cation dependent) (M6PR), mRNA
184	12987	25636	8.22	1.0E-55	U09823.1	NT	Oryctolagus cuniculus New Zealand white elongation factor 1 alpha (Rabelfa2) mRNA, complete cds
1127	13883	26543	3.53	1.0E-55	AB020710.1	NT	Homo sapiens mRNA for KIAA0903 protein, partial cds

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Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1943	14678	27391	1.58	1.0E-55	BE277861.1	EST_HUMAN	601120110F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:2987027 5'
1943	14678	27392	1.58	1.0E-55	BE277861.1	EST_HUMAN	601120110F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:2987027 5'
2324	15049		2.48	1.0E-55	5803174	NT	Homo sapiens SMA3 (SMA3), mRNA
2338	15528	27799	1.17	1.0E-55	AF000990.1	NT	Homo sapiens testis-specific Testis Transcript Y1 (TTY1) mRNA, partial cds
2521	15237	27978	9.05	1.0E-55	X13111.1	NT	Human mRNA for HLA-A11E, a MHC class I molecule (major histocompatibility complex)
2559	15273	28009	4.19	1.0E-55	AB007896.2	NT	Homo sapiens mRNA for KIAA0406 protein, partial cds
2559	15273	28010	4.19	1.0E-55	AB007896.2	NT	Homo sapiens mRNA for KIAA0406 protein, partial cds
2617	15328	28071	1.72	1.0E-55	LS4057.1	NT	Homo sapiens CLP mRNA, partial cds
3970	16719	29353	4.28	1.0E-55	AL163287.2	NT	Homo sapiens chromosome 21 segment HS21C087
4282	17003	29635	1.26	1.0E-55	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
4682	17416		1.02	1.0E-55	N77281.1	EST_HUMAN	yv44g03.r1 Soares fetal liver spleen 1NfLS Homo sapiens cDNA clone IMAGE:245620 5'
5410	18209	30917	0.97	1.0E-55	AF119856.1	NT	Homo sapiens PRO1851 mRNA, complete cds
6178	18955	31929	6.82	1.0E-55	11433046	NT	Homo sapiens hsd domain and RLD 2 (HERC2), mRNA
6178	18955	31930	6.82	1.0E-55	11433046	NT	Homo sapiens hsd domain and RLD 2 (HERC2), mRNA
7888	20583	33712	1.84	1.0E-55	11432894	NT	Homo sapiens discs, large (Drosophila) homolog 2 (chapsyn-110) (DLG2), mRNA
7888	20583	33713	1.84	1.0E-55	11432894	NT	Homo sapiens discs, large (Drosophila) homolog 2 (chapsyn-110) (DLG2), mRNA
7980	20675	33789	0.89	1.0E-55	AF224492.1	NT	Homo sapiens phospholipid scramblase 1 gene, complete cds
7980	20675	33800	0.89	1.0E-55	AF224492.1	NT	Homo sapiens phospholipid scramblase 1 gene, complete cds
10829	23511	36751	1.75	1.0E-55	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
10829	23511	36752	1.75	1.0E-55	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
11425	23192	36423	2.63	1.0E-55	U60960.1	NT	Human infant brain unknown product mRNA, complete cds
11444	23211	36442	1.5	1.0E-55	T10045.1	EST_HUMAN	seq1575 b4HB3MA Cx8-HAP-F1 Homo sapiens cDNA clone b4HB3MA-COT8-HAP-F81 5' similar to similar to Chinese Hamster DHFR-coamplified protein mRNA
11568	24168	37482	2.35	1.0E-55	10567821	NT	Homo sapiens DNA-binding protein (LOC56242), mRNA
7265	19949	33026	1.83	9.0E-56	BE378074.1	EST_HUMAN	601237702F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3600552 5'
2737	15444	28182	5.32	7.0E-56	H19034.1	EST_HUMAN	yv62g03.r1 Soares adult brain N2b5HB65Y Homo sapiens cDNA clone IMAGE:173044 5' similar to contains THR repetitive element
7540	20210	33309	1.67	7.0E-56	AW361213.1	EST_HUMAN	RC1-CT0252-231099-013-b07 CT0252 Homo sapiens cDNA
7540	20210	33310	1.67	7.0E-56	AW361213.1	EST_HUMAN	RC1-CT0252-231099-013-b07 CT0252 Homo sapiens cDNA
1687	14431	27127	1.78	5.0E-56	AW99712.1	EST_HUMAN	RC3-BN0053-170200-011-b01 BN0053 Homo sapiens cDNA
9050	21748	34908	0.86	5.0E-56	AW015507.1	EST_HUMAN	UHH-B10p-seu-e-05-Q-UI.s1 NCL CGAP Sub2 Homo sapiens cDNA clone IMAGE:2710544 3'
10286	22834		1.01	5.0E-56	W28189.1	EST_HUMAN	43c5 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA
12220	25359	30610	2	5.0E-56	H55099.1	EST_HUMAN	CHFR220038 Chromosome 22 exon Homo sapiens cDNA clone C22_55 5'
26	12854	25469	8.58	4.0E-56	AF141349.1	NT	Homo sapiens beta-tubulin mRNA, complete cds

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Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
26	12854	25470	8.58	4.0E-56	AF141349.1	NT	Homo sapiens beta-tubulin mRNA, complete cds
2173	14902		2.69	4.0E-56	BF207586.1	EST_HUMAN	601862050F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:4081551 5'
2712	15419	28157	7.28	4.0E-56	4507728	NT	Homo sapiens tubulin, beta polypeptide (TUBB) mRNA
2712	15419	28158	7.28	4.0E-56	4507728	NT	Homo sapiens tubulin, beta polypeptide (TUBB) mRNA
2815	13287	25929	3.49	4.0E-56	AF003528.1	NT	Homo sapiens X-linked arylidic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
2836	15331	28074	1.48	4.0E-56	AF032488.1	EST_HUMAN	wb00608.x1 NCI_CGAP_GC6 Homo sapiens cDNA clone IMAGE:2305191 3' similar to SW:DCOR_MUSPA P27119 ORNITHINE DECARBOXYLASE;
2836	15331	28075	1.48	4.0E-56	AF032488.1	EST_HUMAN	wb00608.x1 NCI_CGAP_GC8 Homo sapiens cDNA clone IMAGE:2305191 3' similar to SW:DCOR_MUSPA P27119 ORNITHINE DECARBOXYLASE;
6164	18941	31912	6.01	4.0E-56	AF217508.1	NT	Homo sapiens uncharacterized bone marrow protein BM031 mRNA, complete cds
6164	18941	31913	6.01	4.0E-56	AF217508.1	NT	Homo sapiens uncharacterized bone marrow protein BM031 mRNA, complete cds
10403	23049	36268	2.02	4.0E-56	AF043349.1	NT	Homo sapiens lymphocyte-specific protein 1 (LSP1) gene, LSP1-7 allele, partial cds
10841	23523	36764	8.88	4.0E-56	AF080086.1	EST_HUMAN	hm55g12.x1 NCI_CGAP_Bm26 Homo sapiens cDNA clone IMAGE:2163046 3'
10841	23523	36765	8.88	4.0E-56	AF080086.1	EST_HUMAN	hm55g12.x1 NCI_CGAP_Bm28 Homo sapiens cDNA clone IMAGE:2163046 3'
1319	14068	26742	4.17	3.0E-56	8624028	NT	Homo sapiens hypothetical protein PRO1304 (PRO1304), mRNA
3122	15887	28527	1.54	3.0E-56	AA325826.1	EST_HUMAN	EST28899 Cerebellum II Homo sapiens cDNA 5' end
3122	15887	28528	1.54	3.0E-56	AA325826.1	EST_HUMAN	EST28899 Cerebellum II Homo sapiens cDNA 5' end
3815	16567		1.61	3.0E-56	AF055008.1	NT	Homo sapiens MHC class I region
4355	17063	29728	1.43	3.0E-56	7667042	NT	Homo sapiens Down syndrome candidate region 1 (DSCR1), mRNA
4390	17127	29759	4.27	3.0E-56	AL163288.2	NT	Homo sapiens chromosome 21 segment HS21G068
4534	17269	29902	2.34	3.0E-56	5902085	NT	Homo sapiens superkiller viral-like activity 2 (S. cerevisiae homolog)-like (SKV2L), mRNA
5598	18363	31302	2.12	3.0E-56	4759163	NT	Homo sapiens spermatocyte, oocyte and kazal-like domains proteoglycan (testican) (SPOCK) mRNA
5598	18363	31303	2.12	3.0E-56	4759163	NT	Homo sapiens spermatocyte, oocyte and kazal-like domains proteoglycan (testican) (SPOCK) mRNA
6775	19519	32547	7.03	3.0E-56	11421124	NT	Homo sapiens lysosomal-associated membrane protein 2 (LAMP2), mRNA
7223	19908	32981	1.15	3.0E-56	4504970	NT	Homo sapiens LIM binding domain 2 (LDB2) mRNA
7223	19908	32982	1.15	3.0E-56	4504970	NT	Homo sapiens LIM binding domain 2 (LDB2) mRNA
8715	21407	34550	4.68	3.0E-56	11418704	NT	Homo sapiens bone morphogenetic protein 6 (BMP6), mRNA
9713	22364	35562	0.85	3.0E-56	D63479.2	NT	Homo sapiens mRNA for KIAA0145 protein, partial cds
10379	23025	36240	1.38	3.0E-56	11434956	NT	Homo sapiens KIAA0317 gene product (KIAA0317), mRNA
10842	23333	36571	1.71	3.0E-56	AB042556.1	NT	Homo sapiens mRNA, similar to rat myomegalin, complete cds
11284	23945	37239	6.37	3.0E-56	5902013	NT	Homo sapiens nuclear pore complex interacting protein (NPIP), mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11284	23945	37240	6.37	3.0E-56	5802013	NT	Homo sapiens nuclear pore complex interacting protein (NPIP), mRNA
11673	24268	37590	1.74	3.0E-56	U46900.1	NT	Homo sapiens NACP/alpha-synuclein gene, exon 5
11673	24268	37591	1.74	3.0E-56	U46900.1	NT	Homo sapiens NACP/alpha-synuclein gene, exon 5
12085	24587	31083	1.52	3.0E-56	11434876	NT	Homo sapiens caveolin 3 (CAV3), mRNA
12085	24587	31084	1.52	3.0E-56	11434876	NT	Homo sapiens caveolin 3 (CAV3), mRNA
511	13286		1.7	2.0E-56	AA198818.1	EST_HUMAN	zq52a08.s1 Stratiogene neuroepithelium (#637231) Homo sapiens cDNA clone IMAGE:945208 3'
716	15550	26141	1.05	2.0E-56	BE084386.1	EST_HUMAN	RC4-BT0310-110300-015-F10 BT0310 Homo sapiens cDNA
716	15550	26142	1.05	2.0E-56	BE084386.1	EST_HUMAN	RC4-BT0310-110300-015-F10 BT0310 Homo sapiens cDNA
2987	15753	28390	1.18	2.0E-56	AB037835.1	NT	Homo sapiens mRNA for KIAA1414 protein, partial cds
3523	16279	28634	1.84	2.0E-56	AV703184.1	EST_HUMAN	Homo sapiens SET domain and mariner transposase fusion gene (SETMAR) mRNA
6990	18683	32731	1.47	2.0E-56	5730038	NT	Macaca fascicularis protein tyrosine phosphatase (PRL-1) mRNA, complete cds
959	13724		1.84	1.0E-56	AF100830.1	NT	hg23c11.x1 NCI_CGAP_G08 Homo sapiens cDNA clone IMAGE:2846462 3'
3684	18417	29056	2.15	1.0E-56	AW588633.1	EST_HUMAN	hg23c11.x1 NCI_CGAP_G08 Homo sapiens cDNA clone IMAGE:2846462 3'
3684	18417	29057	2.15	1.0E-56	AW588633.1	EST_HUMAN	hg23c11.x1 NCI_CGAP_G08 Homo sapiens cDNA clone IMAGE:2846462 3'
4972	17896	30303	0.99	1.0E-56	AI805162.1	EST_HUMAN	QV-BT077-130199-079 BT077 Homo sapiens cDNA
5118	17836	30453	0.97	1.0E-56	6881002	NT	Mus musculus cytoplasmic polyadenylation element binding protein (Cpeb), mRNA
6724	18558	32589	0.57	1.0E-56	AW60620.1	EST_HUMAN	MF3-ST0203-180100-208-H02 ST0203 Homo sapiens cDNA
9855	22505		0.59	1.0E-56	AL183203.2	NT	Homo sapiens chromosome 21 segment HS21C003
9948	22506	35800	1.71	1.0E-56	AW845987.1	EST_HUMAN	RC2-CT0163-220999-001-E02 CT0163 Homo sapiens cDNA
611	13389		2.82	9.0E-57	AW880885.1	EST_HUMAN	QV0-OT0033-070300-182-H03 OT0033 Homo sapiens cDNA
4180	18620	29548	1.14	9.0E-57	4758279	NT	Homo sapiens EphA4 (EPHA4) mRNA
4180	18620	29549	1.14	9.0E-57	4758279	NT	Homo sapiens EphA4 (EPHA4) mRNA
11183	23848	37134	2.17	9.0E-57	AF228497.1	NT	Homo sapiens serine protease 17 (KLK4) gene, complete cds
11183	23848	37135	2.17	9.0E-57	AF228497.1	NT	Homo sapiens serine protease 17 (KLK4) gene, complete cds
11506	24107	37420	1.48	9.0E-57	AB020981.1	NT	Homo sapiens mRNA for cyclin B2, complete cds
290	13086	25738	3.01	8.0E-57	AW818405.1	EST_HUMAN	QV4-ST0234-181189-037-R05 ST0234 Homo sapiens cDNA
864	13633	26303	6.36	8.0E-57	AW284599.1	EST_HUMAN	xt05d10.x1 NCI_CGAP_Bms3 Homo sapiens cDNA clone IMAGE:2759251 3' similar to gb:U05875
1809	14548	27284	1.51	8.0E-57	AA496109.1	EST_HUMAN	INTERFERON-GAMMA RECEPTOR BETA CHAIN PRECURSOR (HUMAN);
3376	16135	28791	0.98	8.0E-57	4758279	NT	z61b12.1 Scores, testis, NHT Homo sapiens cDNA clone IMAGE:757151 5'
3376	16135	28792	0.98	8.0E-57	4758279	NT	Homo sapiens EphA4 (EPHA4) mRNA
4852	17582	30205	1.3	8.0E-57	4557930	NT	Homo sapiens EphA4 (EPHA4) mRNA
5161	25276	30728	3.29	8.0E-57	11418185	NT	Homo sapiens glutamate receptor, ionotropic, AMPA 4 (GRIA4) mRNA
6306	19078	32063	1.85	8.0E-57	AB020705.1	NT	Homo sapiens acetylase 2, mitochondrial (ACO2), mRNA
							Homo sapiens mRNA for KIAA0898 protein, partial cds

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6372	19141	32137	12.67	8.0E-57	AB023177.1	NT	Homo sapiens mRNA for KIAA0980 protein, partial cds
6372	19141	32138	12.67	8.0E-57	AB023177.1	NT	Homo sapiens mRNA for KIAA0980 protein, partial cds
7349	20330	33107	0.64	8.0E-57	7662263	NT	Homo sapiens KIAA0716 gene product (KIAA0716), mRNA
7648	20312	33423	1.7	8.0E-57	AB020844.1	NT	Homo sapiens mRNA for KIAA0637 protein, partial cds
7648	20312	33424	1.7	8.0E-57	AB020844.1	NT	Homo sapiens mRNA for KIAA0637 protein, partial cds
11480	17896	30487	3.28	8.0E-57	8823349	NT	Homo sapiens hypothetical protein FLJ20371 (FLJ20371), mRNA
12459	24828	31028	2.74	8.0E-57	11545732	NT	Homo sapiens SH3-domain binding protein 1 (SH3BP1), mRNA
12473	24828	31028	1.69	8.0E-57	11545732	NT	Homo sapiens SH3-domain binding protein 1 (SH3BP1), mRNA
12820	25060		2.07	8.0E-57	AB037763.1	NT	Homo sapiens mRNA for KIAA1342 protein, partial cds
2639	16350	28063	1.71	7.0E-57	7667592	NT	Homo sapiens smg GDS-ASSOCIATED PROTEIN (SMAP), mRNA
2639	16350	28094	1.71	7.0E-57	7667592	NT	Homo sapiens smg GDS-ASSOCIATED PROTEIN (SMAP), mRNA
3244	16006	28655	0.9	7.0E-57	7242158	NT	Homo sapiens NME7 (NME7), mRNA
3244	16006	28656	0.9	7.0E-57	7242158	NT	Homo sapiens NME7 (NME7), mRNA
3285	16027	28677	1.08	7.0E-57	6005979	NT	Homo sapiens Kruppel-like factor 8 (KLF8), mRNA
3858	16608	29246	1.39	7.0E-57	AF012872.1	NT	Homo sapiens phosphatidylinositol 4-kinase 230 (p4K230) mRNA, complete cds
3858	16608	29247	1.39	7.0E-57	AF012872.1	NT	Homo sapiens phosphatidylinositol 4-kinase 230 (p4K230) mRNA, complete cds
4398	17135		0.95	7.0E-57	AF020503.1	NT	Homo sapiens FRA3B common fragile region, diadenosine triphosphate hydrolase (PHIT) gene, exon 5
4730	17482	30089	0.95	7.0E-57	U11036.2	NT	Homo sapiens large conductance calcium- and voltage-dependent potassium channel alpha subunit (MaxK) mRNA, complete cds
12785	25310		2.63	5.0E-57	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
3738	18489	29125	1.57	4.0E-57	AB028898.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
786	13558	26220	0.78	3.0E-57	4507798	NT	Homo sapiens ubiquitin protein ligase E3A (human papilloma virus E6-associated protein, Angelman syndrome) (UBE3A) mRNA
1308	14066		16.24	3.0E-57	AA230279.1	EST_HUMAN	no1307.st NCI_CGAP_P1 Homo sapiens cDNA clone IMAGE:1008037 similar to SW:RS10_HUMAN
2390	15111	27848	2.99	3.0E-57	AA348335.1	EST_HUMAN	P46783 40S RIBOSOMAL PROTEIN S10 ;
2707	15414	28151	0.95	3.0E-57	BE676622.1	EST_HUMAN	EST54770 Hippocampus II Homo sapiens cDNA 5' end
2707	15414	28152	0.95	3.0E-57	BE676622.1	EST_HUMAN	733b10.x1 NCI_CGAP_CLL1 Homo sapiens cDNA clone IMAGE:3298443 3' similar to WP:Y47H9C.2
3550	16305	28955	1.74	3.0E-57	AF232708.1	NT	CE20263 ;
3685	16438		62.34	3.0E-57	AW853964.1	EST_HUMAN	733b10.x1 NCI_CGAP_CLL1 Homo sapiens cDNA clone IMAGE:3298443 3' similar to WP:Y47H9C.2
							Homo sapiens cell-line tsA201 a chloride ion current inducer protein [(Cln) gene, complete cds
							RC3-CT0254-110300-027-410 CT0254 Homo sapiens cDNA

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5639	18721	31680	1.24	3.0E-57	11225608	NT	Homo sapiens angiotensin I converting enzyme (peptidyl-dipeptidase A) 2 (ACE2), mRNA
6033	18813	31773	3.23	3.0E-57	BE796537.1	EST_HUMAN	801589896F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3944302 5'
8044	20738	33871	3.77	3.0E-57	W28130.1	EST_HUMAN	4286 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA
8070	20764	33882	2.16	3.0E-57	11545798	NT	Homo sapiens hypothetical protein FLJ11658 (FLJ11658), mRNA
8070	20764	33893	2.16	3.0E-57	11545798	NT	Homo sapiens hypothetical protein FLJ11658 (FLJ11658), mRNA
8179	20873	34008	0.7	3.0E-57	11427757	NT	Homo sapiens KIAA0649 gene product (KIAA0649), mRNA
8328	21021	34167	0.73	3.0E-57	J05282.1	NT	Human farnesyl pyrophosphate synthetase mRNA, complete cds
8757	21449	34598	4.17	3.0E-57	AU117659.1	EST_HUMAN	AU117659 HEMBA1 Homo sapiens cDNA clone HEMBA1001910 5'
9149	21880	35047	1.03	3.0E-57	11545798	NT	Homo sapiens hypothetical protein FLJ11658 (FLJ11658), mRNA
9149	21880	35048	1.03	3.0E-57	11545798	NT	Homo sapiens hypothetical protein FLJ11658 (FLJ11658), mRNA
10825	23508	38747	2.85	3.0E-57	AW248374.1	EST_HUMAN	2820473.5prine NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2820473 5'
12101	25381	30616	8.38	3.0E-57	W23871.1	EST_HUMAN	zb45d11.1 Scores_fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:306549 5'
12480	25281		2.32	3.0E-57	AW178576.1	EST_HUMAN	RCQ-HT0112-080999-001-C08 HT0112 Homo sapiens cDNA
12823	24928	31010	1.48	3.0E-57	AJ003849.1	EST_HUMAN	AJ003849 Selected chromosome 21 cDNA library Homo sapiens cDNA clone MP1010-1L1
1487	14234	28919	1.39	2.0E-57	AF246219.1	NT	Homo sapiens SNARE protein kinase SNAK mRNA, complete cds
1487	14234	28920	1.39	2.0E-57	AF246219.1	NT	Homo sapiens SNARE protein kinase SNAK mRNA, complete cds
3432	18188		1.24	2.0E-57	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
3910	16860	28301	0.79	2.0E-57	BE073284.1	EST_HUMAN	MRO-BT0551-080300-103-b03 BT0551 Homo sapiens cDNA
4474	17209	20834	6.73	2.0E-57	AL163283.2	NT	Homo sapiens chromosome 21 segment HS21C083
5582	18379		1.84	2.0E-57	AA016131.1	EST_HUMAN	za31c06.1 Scores retina N2b4HR Homo sapiens cDNA clone IMAGE:360584 5' similar to contains L1, L3 L1 repetitive element;
5943	18725		33.81	2.0E-57	BF115286.1	EST_HUMAN	7n80R04.x1 NCL_CGAP_Ov18 Homo sapiens cDNA clone IMAGE:3570988 3' similar to contains TAR1.1
6067	18846	31810	0.66	2.0E-57	11491281	NT	MER22 repetitive element;
8529	21221	34363	1.08	2.0E-57	AF045452.1	NT	Homo sapiens small inducible cytokine subfamily A (Cys-Cys), member 22 (SCYA22), mRNA
9746	22397	35602	1.86	2.0E-57	AF067722.1	NT	Homo sapiens cell-line KG1 transcriptional regulatory protein p54 mRNA, complete cds
10526	23171	36396	0.48	2.0E-57	11494330	NT	Homo sapiens 17-beta-hydroxysteroid dehydrogenase IV (HSD17B4) gene, exons 3 and 4
10526	23171	36399	0.49	2.0E-57	11494330	NT	Homo sapiens KIAA1065 protein (KIAA1065), mRNA
11238	23901	37189	2.42	2.0E-57	11424084	NT	Homo sapiens hypothetical protein FLJ20041 (FLJ20041), mRNA
11238	23901	37190	2.42	2.0E-57	11424084	NT	Homo sapiens hypothetical protein FLJ20041 (FLJ20041), mRNA
8593	21285		3.62	1.0E-57	BE043031.1	EST_HUMAN	hc32a08.x1 NCL_CGAP_Ju24 Homo sapiens cDNA clone IMAGE:3038082 3' similar to TR:O00246 O00246
12249	24690		5.08	1.0E-57	AW470791.1	EST_HUMAN	HYPOTHETICAL 9.3 KD PROTEIN; hc33a06.x1 NCL_CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2875499 3' similar to contains THR.b3 THR repetitive element;

Table 4

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5501	18387	31297	0.99	9.0E-58	AA267847.1	EST_HUMAN	EST11348 Uterus Homo sapiens cDNA 5' end
12516	24865	31015	1.55	9.0E-58	BE395061.1	EST_HUMAN	601309465F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3631000 5'
575	13355		1.78	8.0E-58	BE868715.1	EST_HUMAN	601445948F1 NIH_MGC_85 Homo sapiens cDNA clone IMAGE:3850211 5'
639	13418	28055	4.18	8.0E-58	A1798376.1	EST_HUMAN	t34607.x1 NCL CGAP_Oy23 Homo sapiens cDNA clone IMAGE:2220181 3' similar to TR:O16475 O15475 UNNAMED HERV-H PROTEIN;
639	13418	28056	4.18	8.0E-58	A1798378.1	EST_HUMAN	t34607.x1 NCL CGAP_Oy23 Homo sapiens cDNA clone IMAGE:2220181 3' similar to TR:O15475 O15475 UNNAMED HERV-H PROTEIN;
1849	14587	27301	2.37	8.0E-58	11434921	NT	Homo sapiens putative protein O-mannosyltransferase (POMT2), mRNA
1849	14587	27302	2.37	8.0E-58	11434921	NT	Homo sapiens putative protein O-mannosyltransferase (POMT2), mRNA
2974	15740		2.32	8.0E-58	7708132	NT	Homo sapiens DHHC1 protein (LOC81304), mRNA
10762	23446		5.87	7.0E-58	5174542	NT	Homo sapiens MADS box transcription enhancer factor 2, polypeptide B (myocyte enhancer factor 2B) (MEF2B) mRNA
10847	23529	36773	3.6	7.0E-58	AW504109.1	EST_HUMAN	U1HF-BND-all-g-10-0-U1.1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3078967 5'
10847	23529	36774	3.6	7.0E-58	AW504109.1	EST_HUMAN	U1HF-BND-all-g-10-0-U1.1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3078967 5'
2251	14979	27718	1.02	8.0E-58	BE395061.1	EST_HUMAN	601309465F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3631000 5'
2375	15087	27837	3.78	6.0E-58	AU130689	EST_HUMAN	AU130689 NT2RP3 Homo sapiens cDNA clone NT2RP3001283 5'
2902	15868	28316	1.2	6.0E-58	BE242150.1	EST_HUMAN	TCAAP1E1219 Pediatric acute myelogenous leukemia cell (FAB M1) Baylor-HGSC project=TCAA Homo sapiens cDNA clone TCAAP1219
2902	15868	28317	1.2	6.0E-58	BE242150.1	EST_HUMAN	TCAAP1E1219 Pediatric acute myelogenous leukemia cell (FAB M1) Baylor-HGSC project=TCAA Homo sapiens cDNA clone TCAAP1219
6078	18857	31824	1.01	6.0E-58	AF108911.1	NT	Homo sapiens chemokine MIP-2 gamma (MIP-2 gamma) mRNA, complete cds
10208	22856	36072	0.79	6.0E-58	11434746	NT	Homo sapiens protein tyrosine phosphatase, non-receptor type 21 (PTPN21), mRNA
12347	24754		1.58	6.0E-58	11528291	NT	Homo sapiens hypothetical protein FLJ20454 (FLJ20454), mRNA
293	13089	25740	3.79	5.0E-58	4507334	NT	Homo sapiens synaptenin 1 (SYNJ1), mRNA
694	13409	26116	5.41	5.0E-58	BE763994.1	EST_HUMAN	RC4-NT0037-180800-016-b05 NT0057 Homo sapiens cDNA
1172	13926	28589	2.96	5.0E-58	AW797948.1	EST_HUMAN	CM3-UM0043-240300-127-407 NT0043 Homo sapiens cDNA
1172	13926	28590	2.96	5.0E-58	AW797948.1	EST_HUMAN	CM3-UM0043-240300-127-407 NT0043 Homo sapiens cDNA
1173	13926	28589	2.76	5.0E-58	AW797948.1	EST_HUMAN	CM3-UM0043-240300-127-407 NT0043 Homo sapiens cDNA
1173	13926	28590	2.76	5.0E-58	AW797948.1	EST_HUMAN	CM3-UM0043-240300-127-407 NT0043 Homo sapiens cDNA
3317	15077	28727	4.32	5.0E-58	AA988183.1	EST_HUMAN	cr89e07.x1 NCL CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1603908 3'
4229	15970	29594	0.92	5.0E-58	A1838745.1	EST_HUMAN	t389e07.x1 NCL CGAP_GC6 Homo sapiens cDNA clone IMAGE:2238468 3' similar to SW:PRO2_ACACA
5641	18338		2.32	5.0E-58	11496282	NT	P19984 PROFILIN II;
6085	18863	31829	0.86	5.0E-58	H23072.1	EST_HUMAN	Homo sapiens placenta-specific 1 (PLACT), mRNA ym51h07.1 Soares Infant brain 1NIB Homo sapiens cDNA clone IMAGE:52071 5'



Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6301	19074	32060	0.95	5.0E-58	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
6379	19148	32147	1.61	5.0E-58	11421330	NT	Homo sapiens apical protein, <i>Xenopus laevis</i> -like (APXL), mRNA
6680	19597	32836	0.88	5.0E-58	AF051334.1	NT	Homo sapiens ribirin (NBS) mRNA, complete cds
6680	19597	32836	0.88	5.0E-58	AF051334.1	NT	Homo sapiens ribirin (NBS) mRNA, complete cds
7006	19686	32752	0.73	5.0E-58	4885400	NT	Homo sapiens holocytochrome c synthase (cytochrome c heme-lyase) (HCCS) mRNA
7869	20584	33691	7.69	5.0E-58	8922693	NT	Homo sapiens hypothetical protein FLJ10828 (FLJ10828), mRNA
8251	20945	34083	0.7	5.0E-58	AB046837.1	NT	Homo sapiens mRNA for KIAA1617 protein, partial cds
9239	21918	35089	0.88	5.0E-58	6231227	NT	Homo sapiens ribonuclease 6 precursor (RNASE6PL) mRNA
9239	21918	35090	0.88	5.0E-58	5231227	NT	Homo sapiens ribonuclease 6 precursor (RNASE6PL) mRNA
9757	22408	35814	0.88	5.0E-58	11430647	NT	Homo sapiens pre-mRNA splicing factor similar to <i>S. cerevisiae</i> Prp18 (PRP18), mRNA
10023	22671	35887	1.78	5.0E-58	AL163218.2	NT	Homo sapiens chromosome 21 segment HS21C018
10300	22947	36161	0.83	5.0E-58	AB014511.1	NT	Homo sapiens mRNA for KIAA0611 protein, partial cds
10300	22947	36162	0.83	5.0E-58	AB014511.1	NT	Homo sapiens mRNA for KIAA0611 protein, partial cds
11819	24405	37740	2.69	5.0E-58	11431079	NT	Homo sapiens chimera (chimerin) 1 (CHN1), mRNA
12071	25305		1.81	5.0E-58	11526293	NT	Homo sapiens cat eye syndrome chromosome region, candidate 1 (CECR1), mRNA
12612	25330		1.5	5.0E-58	11428423	NT	Homo sapiens acetyl-Coenzyme A carboxylase alpha (ACACA), mRNA
12732	25001		2.67	5.0E-58	11418177	NT	Homo sapiens Ran GTPase activating protein 1 (RANGAPT1), mRNA
364	13162	25804	4.5	4.0E-58	4502302	NT	Homo sapiens ATP synthase, H+ transporting, mitochondrial F1 complex, O subunit (dligomycin sensitivity conferring protein) (ATP5O) mRNA
779	13551	26212	0.88	4.0E-58	4504634	NT	Homo sapiens interleukin 10 receptor, beta (IL10RB), mRNA
1462	14109	26883	1.09	4.0E-58	4503648	NT	Homo sapiens coagulation factor IX (plasma thromboplastic component, Christmas disease, hemophilia B) (F9) mRNA
2637	15349	28091	1.7	4.0E-58	U36251.1	NT	Human beta-prime-adeptin (BAM22) gene, exon 3
3319	16079	28729	1.03	4.0E-58	D16470.1	NT	Human mRNA, Xq terminal portion
3723	16478	29113	1.25	4.0E-58	5031060	NT	Homo sapiens EGF-like repeats and disocidin-like domains 3 (EDIL3), mRNA
11315	23974	37275	7.06	4.0E-58	11424059	NT	Homo sapiens E1B-55kDa-associated protein 5 (E1B-AP5), mRNA
326	13127		2.67	3.0E-58	R17879.1	EST_HUMAN	Homo sapiens E1B-55kDa-associated protein 5 (E1B-AP5), mRNA
1368	14116	26791	2.36	3.0E-58	4758981	NT	Homo sapiens peptide YY (PYY) mRNA
3174	15637	28585	2.78	3.0E-58	BF60848.1	EST_HUMAN	Homo sapiens peptide YY (PYY) mRNA
3174	15637	28586	2.78	3.0E-58	BF60848.1	EST_HUMAN	Homo sapiens peptide YY (PYY) mRNA
6167	18944	31915	0.63	3.0E-58	BE089509.1	EST_HUMAN	802185789F1 NIH_MGC_45 Homo sapiens cDNA clone IMAGE:4308943 5'
6362	19122	32114	1.43	3.0E-58	F07056.1	EST_HUMAN	802185789F1 NIH_MGC_45 Homo sapiens cDNA clone IMAGE:4308943 5'
6544	19309	32314	1.4	3.0E-58	AV712977.1	EST_HUMAN	QV0-BT0702-170400-194409 BT0702 Homo sapiens cDNA
919	13686	26350	11.9	2.0E-58	AF068824.1	NT	HSC1TG081 normalized infant brain cDNA Homo sapiens cDNA clone DCAAZG04 5'
							AV712977 DCA Homo sapiens cDNA clone DCAAZG04 5'
							Homo sapiens 5-aminolevulinic synthase 2 (ALAS2) gene, complete cds

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1267	14016		10	2.0E-58	BE208532.1	EST_HUMAN	bat08b07.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823733 5' similar to gb:XB0301 60S RIBOSOMAL PROTEIN L6 (HUMAN); gb:XB1987 M.musculus mRNA for TAX responsive element binding protein (MOUSE);
5273	25065	30708	3.4	2.0E-58	BE907186.1	EST_HUMAN	601499961F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3901911 5'
5273	25065	30734	3.4	2.0E-58	BE907186.1	EST_HUMAN	601499961F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3901911 5'
5966	18748	31708	1.12	2.0E-58	BF513488.1	EST_HUMAN	UJH-BW1-ams-g-11-0-JL1 NCI CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3071060 3'
6031	18811	31771	1.88	2.0E-58	A1124874.1	EST_HUMAN	am57e02.x1 Johnston frontal cortex Homo sapiens cDNA clone IMAGE:1530674 3' similar to WP-ZK328.1 CE06085 UBIQUITIN CONJUGATING ENZYME; RECOVERIN SUBFAMILY OF EF-HAND CALCIUM BINDING PROTEIN;
6062	18841	31803	0.8	2.0E-58	R925697.1	EST_HUMAN	Yp08h06.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:196379 5'
6828	19489	32511	1.12	2.0E-58	A1291407.1	EST_HUMAN	qim84c01.x1 NCI CGAP_Lu8 Homo sapiens cDNA clone IMAGE:1885424 3'
7056	19747	32808	2.83	2.0E-58	AF134838.1	NT	Homo sapiens endocytic receptor Endo180 (ENDO180) mRNA, complete cds
7056	19747	32810	2.83	2.0E-58	AF134838.1	NT	Homo sapiens endocytic receptor Endo180 (ENDO180) mRNA, complete cds
10841	23332	36570	21.77	2.0E-58	BF307745.1	EST_HUMAN	601890812F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4131891 5'
10885	23565	36813	2.43	2.0E-58	AW872841.1	EST_HUMAN	hm25f08.x1 NCI CGAP_Thy4 Homo sapiens cDNA clone IMAGE:3013671 3'
705	13480	26128	0.86	1.0E-58	M65134.1	NT	Human complement component C5 mRNA, 3' end
1046	13805	28464	2.41	1.0E-58	6274549	NT	Homo sapiens NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 9 (22kD, B22) (NDUFB9), mRNA
1304	14053	26726	1.61	1.0E-58	AW957182.1	EST_HUMAN	EST369252 MAGE resequences, MAGD Homo sapiens cDNA
1304	14053	28727	1.61	1.0E-58	AW957182.1	EST_HUMAN	EST369252 MAGE resequences, MAGD Homo sapiens cDNA
1378	14124	28798	1.13	1.0E-58	AJ238063.1	NT	Homo sapiens partial AF-4 gene, exons 2 to 7 and Alu repeat elements
2805	15510	28251	2.37	1.0E-58	4759160	NT	Homo sapiens steroid regulatory element binding transcription factor 2 (SREBF2) mRNA
2834	14738	27462	1.6	1.0E-58	5174444	NT	Homo sapiens G protein-coupled receptor 68A (GPR68A) mRNA
3526	16282	28838	0.88	1.0E-58	4758081	NT	Homo sapiens chondroitin sulfate proteoglycan 2 (versican) (CSPG2) mRNA
3526	16282	28839	0.88	1.0E-58	4758081	NT	Homo sapiens chondroitin sulfate proteoglycan 2 (versican) (CSPG2) mRNA
4913	17641	30256	4.75	1.0E-58	A1141063.1	EST_HUMAN	oz43h01.x1 Soares NIH/MPu_S1 Homo sapiens cDNA clone IMAGE:1678129 3'
6751	18543	31465	1.31	1.0E-58	BE061890.1	EST_HUMAN	RC1-BT0254-290100-015-s01 BT0254 Homo sapiens cDNA
6764	19508	32833	0.8	1.0E-58	11422031	NT	Homo sapiens hypothetical protein (LOC51260), mRNA
8013	20708		0.5	1.0E-58	AW973537.1	EST_HUMAN	EST385637 MAGE resequences, MAGM Homo sapiens cDNA
8768	21460	34609	0.68	1.0E-58	4503314	NT	Homo sapiens myomesin (M-protein) 2 (165kD) (MYOM2), mRNA
8980	21571	34714	0.91	1.0E-58	AV751001.1	EST_HUMAN	AV751001 NPC Homo sapiens cDNA clone NPCACH09 5'
8979	21689	34818	0.68	1.0E-58	AA412397.1	EST_HUMAN	z89f05.r1 Soares testis NHT Homo sapiens cDNA clone IMAGE:730497 5'
8979	21689	34819	0.68	1.0E-58	AA412397.1	EST_HUMAN	z89f05.r1 Soares testis NHT Homo sapiens cDNA clone IMAGE:730497 5'
10086	22734	35949	1.21	1.0E-58	11432894	NT	Homo sapiens discs, large (Drosophila) homolog 2 (chapsyn-110) (DLG2), mRNA

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11780	24371		2.11	1.0E-68	X63392.1	NT	H. sapiens immunoglobulin kappa light chain variable region L14
11816	24404	37739	1.57	1.0E-68	D61405.1	NT	Human MSH3 gene, exon10
2225	14953	27691	29.49	8.0E-59	4507378	NT	Homo sapiens TATA box binding protein (TBP) mRNA
8080	20774	33604	2.49	8.0E-59	A1781963.1	EST_HUMAN	wt50d06.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2384171 3'
173	15536		1.74	6.0E-59	BF035327.1	EST_HUMAN	601458531F1 NIH_MGC_96 Homo sapiens cDNA clone IMAGE:3962086 5'
8144	20838	33970	0.61	6.0E-59	A1750970.1	EST_HUMAN	cr08h02.y1 Normal Human Trabecular Bone Cells Homo sapiens cDNA clone NHTBC_cr08h02 random
1748	14490	27189	1.32	5.0E-59	AW157281.1	EST_HUMAN	au83h05.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2783895 3' similar to TR:075786 075786 GANGLIOSIDE-INDUCED DIFFERENTIATION ASSOCIATED PROTEIN 1.;
1748	14490	27190	1.32	5.0E-59	AW157281.1	EST_HUMAN	au83h05.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2783895 3' similar to
3124	15889	28530	6.98	5.0E-59	A1807484.1	EST_HUMAN	TR:075786 075786 GANGLIOSIDE-INDUCED DIFFERENTIATION ASSOCIATED PROTEIN 1.;
4810	17345	29978	6.55	5.0E-59	X83497.1	NT	wt48c11.x1 Soares NFL_T_GBC S1 Homo sapiens cDNA clone IMAGE:2358836 3'
6982	17998	30526	7.5	5.0E-59	AW162304.1	EST_HUMAN	H. sapiens DNA for ZNF80-linked ERV9 long terminal repeat
8705	21397	34544	1.04	5.0E-59	11421778	NT	au68c07.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2781228 3' similar to contains element TAR1 repetitive element;
9804	22257	35443	1.62	5.0E-59	AV762869.1	EST_HUMAN	Homo sapiens polymerase (RNA) III (DNA directed) (39kd) (RPC39), mRNA
10823	23508	36745	3.78	5.0E-59	11434908	NT	AV762869 MDS Homo sapiens cDNA clone MDSEIC12 5'
776	13548	26210	1.66	4.0E-59	D80006.1	NT	Homo sapiens hypothetical protein (LOC57143), mRNA
5450	18249	31138	1.03	4.0E-59	11034810	NT	Human mRNA for KIAA0184 gene, partial cds
12203	25236		1.91	4.0E-59	AF057720.1	NT	Homo sapiens catenin (cadherin-associated protein), delta 2 (neural plakophilin-related arm-repeat protein) (CTNND2), mRNA
9	12836		6.13	3.0E-59	AW965624.1	EST_HUMAN	Homo sapiens 17-beta-hydroxysteroid dehydrogenase IV (HSD17B4) gene, promoter region and exon 1
219	13030	25666	4.58	3.0E-59	7862247	NT	EST377582 MAGE resequencer, MAGI Homo sapiens cDNA
1705	14448	27147	8.2	3.0E-59	4505960	NT	Homo sapiens KIAA0680 gene product (KIAA0680), mRNA
1705	14448	27148	8.2	3.0E-59	4505960	NT	Homo sapiens plasminogen activator, tissue (PLATa) mRNA
2125	14856	27585	5.59	3.0E-59	AB029035.1	NT	Homo sapiens plasminogen activator, tissue (PLATa) mRNA
2125	14856	27586	5.59	3.0E-59	AB029035.1	NT	Homo sapiens mRNA for KIAA1112 protein, partial cds
3126	15891	28534	3.77	3.0E-59	4502014	NT	Homo sapiens mRNA for KIAA1112 protein, partial cds
3126	15891	28535	3.77	3.0E-59	4502014	NT	Homo sapiens A kinase (PRKA) anchor protein 1 (AKAP1), mRNA
3805	16557	28189	1.45	3.0E-59	4508044	NT	Homo sapiens A kinase (PRKA) anchor protein 2 (AKAP2), mRNA
4638	17372	30007	0.98	3.0E-59	AL163284.2	NT	Homo sapiens zona pellucida glycoprotein 2 (sperm receptor) (ZP2) mRNA
4738	17470	30107	0.92	3.0E-59	4759329	NT	Homo sapiens chromosome 21 segment HS21C084
							Homo sapiens Testis-specific XX-related protein on Y (XXRY) mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4789	17520	30143	1.57	3.0E-59	7427522	NT	Homo sapiens protein tyrosine phosphatase, receptor type, T (PTPRT), mRNA
4990	17713		0.97	3.0E-59	M85981.1	NT	Human prothormone converting enzyme (NEC2) gene, exon 2
6126	18904	31872	2.12	3.0E-59	8624074	NT	Homo sapiens hypothetical protein PRO1741 (PRO1741), mRNA
7259	18943	33020	1.94	3.0E-59	5454137	NT	Homo sapiens nuclear receptor co-repressor 1 (NCOR1), mRNA
7832	20527	33653	1.16	3.0E-59	X12556.1	NT	Human mRNA for dbi proto-oncogene
7832	20527	33654	1.16	3.0E-59	X12556.1	NT	Human mRNA for dbi proto-oncogene
9044	22592	35794	0.87	3.0E-59	X70251.1	NT	H. sapiens CKII-alpha gene
9044	22592	35795	0.87	3.0E-59	X70251.1	NT	H. sapiens CKII-alpha gene
12327	24746		6.04	3.0E-59	11417895	NT	Homo sapiens gamma-glutamyltransferase-like activity 1 (GGTLA1), mRNA
7693	20367		0.71	2.0E-59	BF373326.1	EST_HUMAN	MR0-FT0144-250700-002-410 FT0144 Homo sapiens cDNA
9537	22190		6.32	2.0E-59	AA309774.1	EST_HUMAN	EST180633 Jurkat T-cells V Homo sapiens cDNA 5' end
10425	23071		1.19	2.0E-59	BF365554.1	EST_HUMAN	RC0-NT0036-100700-032-407 NT0036 Homo sapiens cDNA
10734	23421	36863	2.6	2.0E-59	AW410988.1	EST_HUMAN	fn07n04.x1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:2961654 5'
10734	23421	36864	2.6	2.0E-59	AW410988.1	EST_HUMAN	fn07n04.x1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:2961654 5'
11311	23970	37274	1.31	2.0E-59	H61604.1	EST_HUMAN	y48n09.r1 Soares fetal liver spleen 1NfLS Homo sapiens cDNA clone IMAGE:208673 5' similar to SP-POL_FENV1 P31792 POL. POLYPROTEIN ;
12091	24595	31126	2.93	2.0E-59	A1631809.1	EST_HUMAN	wa36c12.x1 NCI CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2300182 3' similar to TR:Q86542
12605	25263	30719	4.65	2.0E-59	L11645.1	NT	Q86542 RTVL-H PROTEIN, contains LTR7.b1 LTR7 repetitive element ;
159	12974		3.03	1.0E-59	BE288411.1	EST_HUMAN	Homo sapiens alpha-tubulin mRNA, complete cds
1529	14276	26964	0.93	1.0E-59	T92822.1	EST_HUMAN	601176757F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3531927 5'
2412	15133	27870	1.19	1.0E-59	D11456.2	NT	ye25c09.r1 Stratagene lung (#837210) Homo sapiens cDNA clone IMAGE:118768 5' similar to SP:S21348
2412	15133	27871	1.19	1.0E-59	D11456.2	NT	S21348 HYPOTHETICAL PROTEIN 4- ;
2623	15335		2.47	1.0E-59	AA748468.1	EST_HUMAN	Homo sapiens Xdh mRNA for xanthine dehydrogenase, complete cds
7462	20135	33227	1.08	1.0E-59	AJ130894.1	NT	Homo sapiens Xdh mRNA for xanthine dehydrogenase, complete cds
7617	20263	33392	0.97	1.0E-59	BE268814.1	EST_HUMAN	oa56h11.s1 NCI CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1306028 3' similar to TR:Q13537
7617	20263	33393	0.97	1.0E-59	BE268814.1	EST_HUMAN	Q13537 MER37 TRANSPOSABLE ELEMENT, COMPLETE CONSENSUS SEQUENCE. ;
9285	22039	35210	0.86	1.0E-59	11419630	NT	Homo sapiens mRNA for transcription factor
9504	22157	35337	0.54	1.0E-59	11428849	NT	601111851F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3352692 5'
9504	22157	35338	0.54	1.0E-59	11428849	NT	601111851F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3352692 5'
10760	20135	33227	12.88	1.0E-59	AJ130894.1	NT	Homo sapiens zinc finger protein 275 (ZNF275), mRNA
747	13520	26178	0.85	8.0E-90	AW977645.1	EST_HUMAN	Homo sapiens 3-hydroxyisobutyryl-Coenzyme A hydrolase (HIBCH), mRNA
							Homo sapiens mRNA for transcription factor
							Homo sapiens mRNA for transcription factor
							EST389849 IMAGE:resquences, MAGO Homo sapiens cDNA

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1465	14202	26886	2.65	8.0E-60	4759159	NT	Homo sapiens small nuclear ribonucleoprotein D3 polypeptide (18KD) (SNRPD3) mRNA
2169	14898	27632	3.6	8.0E-60	5174856	NT	Homo sapiens differentiation-related gene 1 (nickel-specific induction protein) (RTP) mRNA
2169	14898	27633	3.6	8.0E-60	5174858	NT	Homo sapiens differentiation-related gene 1 (nickel-specific induction protein) (RTP) mRNA
5892	18677	31623	1.12	8.0E-60	AB029004.1	NT	Homo sapiens mRNA for KIAA1081 protein, partial cds
8411	19179	32178	1.07	8.0E-60	S83182.1	NT	hyaluronan-binding protein-hepatocyte growth factor activator homolog [human, plasma, mRNA, 2408 nt]
7698	20284	33372	1.07	8.0E-60	11420841	NT	Homo sapiens phosphate cytidylyltransferase 1, choline, beta isoform (PCT1B), mRNA
7895	20590	33887	2.28	8.0E-60	X17033.1	NT	Human mRNA for integrin alpha-2 subunit
8837	21529	34675	2.6	8.0E-60	11428949	NT	Homo sapiens S-antigen; retina and pineal gland (arrestin) (SAG), mRNA
8371	21946	35118	0.98	8.0E-60	11417118	NT	Homo sapiens KIAA0433 protein (KIAA0433), mRNA
9371	21946	35119	0.98	8.0E-60	11417118	NT	Homo sapiens KIAA0433 protein (KIAA0433), mRNA
10473	23119	36348	0.59	8.0E-60	5453987	NT	Homo sapiens RAN binding protein 7 (RANBP7), mRNA
10736	23423	36886	6.36	8.0E-60	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
10736	23423	36887	6.36	8.0E-60	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
737	13511	26169	3.51	7.0E-60	AF055006.1	NT	Homo sapiens MHC class 1 region
738	13511	26169	17.82	7.0E-60	AF055006.1	NT	Homo sapiens MHC class 1 region
796	13588	26228	0.98	7.0E-60	4504634	NT	Homo sapiens interleukin 10 receptor, beta (IL10RB), mRNA
2124	14855	27884	1.08	7.0E-60	AF077188.1	NT	Homo sapiens cullin 4A (CUL4A) mRNA, complete cds
2788	15493	28233	1.53	7.0E-60	AB011153.1	NT	Homo sapiens mRNA for KIAA0581 protein, partial cds
4158	16898	28627	2.56	7.0E-60	4505488	NT	Homo sapiens ornithine decarboxylase 1 (ODC1) mRNA
9307	21974	35149	4.02	7.0E-60	H58041.1	EST_HUMAN	y1204.1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:205087 5' similar to contains LTR5 repetitive element;
11337	24027	37331	2.11	7.0E-60	H58041.1	EST_HUMAN	y1204.1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:205087 5' similar to contains LTR5 repetitive element;
2177	14906	27639	1.06	6.0E-60	BE984674.2	EST_HUMAN	601668751R1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:388008 3'
8336	21028		10.5	6.0E-60	H52456.1	EST_HUMAN	y178H09.1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:201863 5' similar to contains OPR repetitive element;
82	12908	25545	2.29	5.0E-60	AB07917.1	EST_HUMAN	wf52c07.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2359212 3'
82	12908	25546	2.29	5.0E-60	AB07917.1	EST_HUMAN	wf52c07.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2359212 3'
2972	15738		1.27	4.0E-60	AA289037.1	EST_HUMAN	EST11498 Uterus Homo sapiens cDNA 5' end similar to similar to retrovirus-related pol
7253	19837	33012	0.89	4.0E-60	BF196088.1	EST_HUMAN	h61805.x1 NCI CGAP_K411 Homo sapiens cDNA clone IMAGE:3134913 3' similar to SW:RHOP_MOUSE Q01085 GTP-RHO BINDING PROTEIN 1;
9024	21714		0.68	4.0E-60	AL163278.2	NT	Homo sapiens chromosome 21 segment HS21C078
11267	23928	37219	1.29	4.0E-60	11433587	NT	Homo sapiens v-rat-1 murine leukemia viral oncogene homolog 1 (RAF1), mRNA

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11267	23929	37220	1.29	4.0E-60	11433597	NT	Homo sapiens v-ref-1 murine leukemia viral oncogene homolog 1 (RAF1), mRNA
1852	14590	27305	4.44	3.0E-60	BE562611.1	EST_HUMAN	601336446F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3690395 5'
1852	14590	27306	4.44	3.0E-60	BE562611.1	EST_HUMAN	601336446F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3690395 5'
1862	14600		1.92	3.0E-60	6031190	NT	Homo sapiens profilin (PHIB) mRNA
4424	17160	29790	1.94	3.0E-60	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
5294	18099	30758	0.57	3.0E-60	BF365143.1	EST_HUMAN	QV4-NIN1149-250900-423-f01 NN1149 Homo sapiens cDNA
5554	18351	31260	2.12	3.0E-60	AW836186.1	EST_HUMAN	RC3-LT0023-200100-012-001 LT0023 Homo sapiens cDNA
6856	17833	30506	1	3.0E-60	AI792814.1	EST_HUMAN	d60h11.y6 NCL_CGAP_Kid3 Homo sapiens cDNA clone IMAGE:1534053 5' similar to SW:UDP_MOUSE
8301	20995	34132	4.97	3.0E-60	5174644	NT	P52624 URIDINE PHOSPHORYLASE
8301	20995	34133	4.97	3.0E-60	5174644	NT	Homo sapiens prolidase dehydrogenase (proline oxidase) (PRODH) mRNA
8482	21174	34319	0.51	3.0E-60	AI040236.1	EST_HUMAN	056409.x1 Soares NIHMPu_S1 Homo sapiens cDNA clone IMAGE:1690337 3' similar to SW:FORM_MOUSE Q05960 FORMIN
8841	21333	34477	4.32	3.0E-60	5174644	NT	Homo sapiens prolidase dehydrogenase (proline oxidase) (PRODH) mRNA
9559	22212	35398	0.47	3.0E-60	BF102612.1	EST_HUMAN	601046227F1 NIH_MGC_60 Homo sapiens cDNA clone IMAGE:3690390 5'
11162	23829	37107	1.26	3.0E-60	11427120	NT	Homo sapiens CGI-152 protein (LOC57130), mRNA
11162	23829	37108	1.26	3.0E-60	11427120	NT	Homo sapiens CGI-152 protein (LOC57130), mRNA
12686	25297		2.06	3.0E-60	AA495286.1	EST_HUMAN	ab07h04.t1 Stragene lung (#837210) Homo sapiens cDNA clone IMAGE:840151 5' similar to contains LTR10.11 LTR10 repetitive element;
29	12857	25474	3.63	2.0E-60	AY008285.1	NT	Homo sapiens solute carrier (SLC25A18) mRNA, complete cds; nuclear gene for mitochondrial product
1404	14151	26831	7.35	2.0E-60	Z11694.1	NT	H. sapiens 41kDa protein kinase related to rat ERK2
1716	14468	27155	1.29	2.0E-60	M24603.1	NT	Human bcr protein mRNA, 5' end
1724	14467	27166	1.59	2.0E-60	AY008285.1	NT	Homo sapiens solute carrier (SLC25A18) mRNA, complete cds; nuclear gene for mitochondrial product
2714	15421	28160	1.98	2.0E-60	AW078005.1	EST_HUMAN	EST1300114 IMAGE resequenced, MAGO Homo sapiens cDNA
3598	16321	28999	0.69	2.0E-60	4757897	NT	Homo sapiens v-ref murine sarcoma viral oncogene homolog B1 (BRAF) mRNA
3895	16845	29285	0.73	2.0E-60	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
6208	18983	31962	0.86	2.0E-60	AI791962.1	EST_HUMAN	nn01f12.y6 NCL_CGAP_C90 Homo sapiens cDNA clone IMAGE:1076495 5' similar to contains THR.H1 THR repetitive element;
6400	19109	32168	1.87	2.0E-60	AF004877.1	NT	Homo sapiens pro-alpha 2(I) collagen (COL1A2) gene, complete cds
6615	19378	32983	0.98	2.0E-60	AF157476.1	NT	Homo sapiens DNA polymerase zeta catalytic subunit (REV3) mRNA, complete cds
6760	17919	30983	2.43	2.0E-60	4503044	NT	Homo sapiens corticotropin releasing hormone receptor 2 (CRHR2) mRNA
6750	17919	30984	2.43	2.0E-60	4503044	NT	Homo sapiens corticotropin releasing hormone receptor 2 (CRHR2) mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7010	19702	32757	2.73	2.0E-60	AA311159.1	EST_HUMAN	EST181049 Jurkat T-cells V Homo sapiens cDNA 5' end similar to prothymosin, alpha
7010	19702	32758	2.73	2.0E-60	AA311159.1	EST_HUMAN	EST181049 Jurkat T-cells V Homo sapiens cDNA 5' end similar to prothymosin, alpha
7124	19812	32880	0.59	2.0E-60	AB08124.1	EST_HUMAN	1b23d09.x1 NCI_CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2055185 3' similar to SW:GALR_RAT
7532	20202		0.79	2.0E-60	BF512806.1	EST_HUMAN	Q62805 GALANIN RECEPTOR;
7904	20599	33729	0.84	2.0E-60	X85597.1	EST_HUMAN	UIH-BW1-emu-c-02-0-U1.s1 NCI_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3071210 3'
8768	21458	34608	3.01	2.0E-60	L36033.1	NT	HS15BEST human adult testis Homo sapiens cDNA clone CAM TEST15
9878	22528	35724	2.28	2.0E-60	11991659	NT	Human pre-B cell stimulating factor homologue (SDF1b) mRNA, complete cds
9878	22528	35724	2.28	2.0E-60	11991659	NT	Homo sapiens sema domain, transmembrane domain (TM), and cytoplasmic domain, (semaphorin) 6A
9878	22528	35724	2.28	2.0E-60	11991659	NT	(SEMA6A), mRNA
11448	23216	36448	1.53	2.0E-60	11434729	NT	Homo sapiens sema domain, transmembrane domain (TM), and cytoplasmic domain, (semaphorin) 8A
11809	24398	37732	1.8	2.0E-60	BF530674.1	EST_HUMAN	(SEMA6A), mRNA
11809	24398	37733	1.8	2.0E-60	BF530674.1	EST_HUMAN	Homo sapiens ribosomal protein S6 kinase, 80kD, polypeptide 5 (RPS8KA5), mRNA
12364	24767		3.02	2.0E-60	11418192	NT	602071973F1 NCI_CGAP_Bm87 Homo sapiens cDNA clone IMAGE:4214883 5'
12494	25228		1.93	2.0E-60	AF068757.1	NT	602071973F1 NCI_CGAP_Bm87 Homo sapiens cDNA clone IMAGE:4214883 5'
12496	24851		2.34	2.0E-60	11418088	NT	Homo sapiens non-histone chromosome protein 2 (S. cerevisiae)-like 1 (NHIF2L1), mRNA
12510	24862		1.77	2.0E-60	AB011399.1	NT	Homo sapiens somatostatin receptor subtype 3 (SSTR3) gene, 5' flanking region and partial cds
509	13203	25025	1.13	1.0E-60	BE178586.1	EST_HUMAN	Homo sapiens similar to HSPC022 protein (H. sapiens) (LOC83504), mRNA
3882	16632	29271	1.16	1.0E-60	AU143389.1	EST_HUMAN	Homo sapiens gene for AF-8, complete cds
4901	17628	30246	1.2	1.0E-60	AL163283.2	NT	PM3-HT0605-270200-001-ec06 HT0605 Homo sapiens cDNA
7848	20543	33671	0.91	1.0E-60	BE064410.1	EST_HUMAN	AU143389 Y79AA1 Homo sapiens cDNA clone Y79AA1001854 5'
8953	21345		3.46	1.0E-60	AA244041.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C085
8953	21345		3.46	1.0E-60	AA244041.1	EST_HUMAN	RC4-BT0311-141199-011-H05 BT0311 Homo sapiens cDNA
1077	13835	26403	2.21	9.0E-61	AU118344.1	EST_HUMAN	nc04e12.l1 NCI_CGAP_P1 Homo sapiens cDNA clone IMAGE:1007182 similar to contains L1.H L1
2676	15385	28126	1.16	8.0E-61	AW006478.1	EST_HUMAN	repetitive element;
2676	15385	28127	1.18	8.0E-61	AW006478.1	EST_HUMAN	AV754081 TP Homo sapiens cDNA clone TPGAED05 5'
2951	15717		1.53	8.0E-61	X57147.1	NT	AU118344 HEMBA1 Homo sapiens cDNA clone HEMBA1005683 5'
7786	20491	33614	1.05	8.0E-61	AA583968.1	EST_HUMAN	wf05b10.x1 NCI_CGAP_C03 Homo sapiens cDNA clone IMAGE:2506555 3'
124	12941	25583	1.97	7.0E-61	7706870	NT	wf05b10.x1 NCI_CGAP_C03 Homo sapiens cDNA clone IMAGE:2506555 3'
124	12941	25584	1.97	7.0E-61	7706870	NT	Human endogenous retrovirus pHE-1 (ERV9)
125	12941	25583	2.38	7.0E-61	7706870	NT	Human endogenous retrovirus pHE-1 (ERV9)
125	12941	25584	2.38	7.0E-61	7706870	NT	nm59g06.s1 NCI_CGAP_Lart Homo sapiens cDNA clone IMAGE:1089218 3'
125	12941	25584	2.38	7.0E-61	7706870	NT	Homo sapiens PXR2b protein (PXR2b), mRNA
125	12941	25584	2.38	7.0E-61	7706870	NT	Homo sapiens PXR2b protein (PXR2b), mRNA
125	12941	25584	2.38	7.0E-61	7706870	NT	Homo sapiens PXR2b protein (PXR2b), mRNA
125	12941	25584	2.38	7.0E-61	7706870	NT	Homo sapiens PXR2b protein (PXR2b), mRNA

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5034	12941	25583	1.04	7.0E-01	7706670	NT	Homo sapiens PXR2b protein (PXR2b), mRNA
5034	12941	25584	1.04	7.0E-01	7706670	NT	Homo sapiens PXR2b protein (PXR2b), mRNA
259	13067	25705	2.95	6.0E-01	BE409310.1	EST_HUMAN	601300938F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3635480 5'
793	13565	26226	1.82	6.0E-01	BE409310.1	EST_HUMAN	601300938F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3635480 5'
1298	14047	26719	15	6.0E-01	AF118900.1	NT	Homo sapiens PRO2014 mRNA, complete cds
1626	14372	27061	0.97	6.0E-01	BE257400.1	EST_HUMAN	601108238F1 NIH_MGC_18 Homo sapiens cDNA clone IMAGE:3350145 5'
1643	14389	27079	2.83	6.0E-01	AA596033.1	EST_HUMAN	nm68409.s1 NCI_CGAP_Lar1 Homo sapiens cDNA clone IMAGE:1088897 3'
2123	14864	27583	1.58	6.0E-01	AY008285.1	NT	Homo sapiens solute carrier (SLC25A18) mRNA, complete cds; nuclear gene for mitochondrial product
3301	18063	28711	9.37	6.0E-01	AU130689.1	EST_HUMAN	AU130689 NT2RP3 Homo sapiens cDNA clone NT2RP3001283 5'
5941	18723	31682	3.37	6.0E-01	S79249.1	NT	ig-beta/B28-CD79b (alternatively spliced) [human, B cells, mRNA Partial, 375 nt]
7242	19927	33003	1.82	6.0E-01	U24498.1	NT	Human autosomal dominant polycystic kidney disease protein 1 (PKD1) gene
7518	20189	33282	1.87	6.0E-01	AF036737.1	NT	Homo sapiens general transcription factor 2-I (GTF2I) mRNA, complete cds
11474	24075	37384	1.35	6.0E-01	AF080386.1	NT	Homo sapiens napsin A mRNA, complete cds
11474	24075	37385	1.35	6.0E-01	AF080386.1	NT	Homo sapiens napsin A mRNA, complete cds
12265	13565	26226	1.82	6.0E-01	BE409310.1	EST_HUMAN	601300938F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3635480 5'
350	13149	25789	1.73	5.0E-01	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
1674	14419	27112	2.22	5.0E-01	4506008	NT	Homo sapiens protein phosphatase 1, regulatory subunit 10 (PPP1R10) mRNA
3032	15798	28444	2.58	5.0E-01	AL163279.2	NT	Homo sapiens chromosome 21 segment HS21C070
3193	15956	28608	3.27	5.0E-01	4502166	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
3963	16712		1.78	5.0E-01	AJ229041.1	NT	Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22; segment 1/3
4941	13149	25789	1.07	5.0E-01	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
5080	17799	30416	3.38	5.0E-01	4502298	NT	Homo sapiens ATPase, Ca++ transporting, plasma membrane 1 (ATP2B1) mRNA
5725	18517	31438	0.87	4.0E-01	7881637	NT	Homo sapiens DKFZP568B023 protein (DKFZP568B023), mRNA
12068	24582		3.51	4.0E-01	AV731140.1	EST_HUMAN	AV731140 HTF Homo sapiens cDNA clone HTFAR801 5'
8320	21013	34151	0.69	3.0E-01	AF150190.1	EST_HUMAN	AF150190 Human mRNA from cd34+ stem cells Homo sapiens cDNA clone CBDA9B04
8596	21288	34427	0.84	3.0E-01	AA301233.1	EST_HUMAN	EST14323 Testis tumor Homo sapiens cDNA 5' end
8596	21288	34428	0.84	3.0E-01	AA301233.1	EST_HUMAN	EST14323 Testis tumor Homo sapiens cDNA 5' end
486	13271	25906	1.52	2.0E-01	8922828	NT	Homo sapiens hypothetical protein FLJ11028 (FLJ11028), mRNA
1190	13942	26607	0.82	2.0E-01	BE168410.1	EST_HUMAN	QV3-HT0513-060400-147-d01 HT0513 Homo sapiens cDNA
1190	13942	26608	0.82	2.0E-01	BE168410.1	EST_HUMAN	QV3-HT0513-060400-147-d01 HT0513 Homo sapiens cDNA
1680	14408	27097	1	2.0E-01	N53039.1	EST_HUMAN	yf53d11.s1 Sources fetal liver spleen INFLS Homo sapiens cDNA clone IMAGE:248453 3' similar to gb:L25444 GOS RIBOSOMAL PROTEIN L35A (HUMAN);



Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2647	15357		1.04	2.0E-61	N39397.1	EST_HUMAN	y03f11.1 Soares melanocyte 2NblHM Homo sapiens cDNA clone IMAGE:270189 5'
6332	19102	32090	0.98	2.0E-61	11426188	NT	Homo sapiens ATPase, H <sup>+</sup> transporting, lysosomal (vacuolar proton pump) non-catalytic accessory protein 1A (110/116kD) (ATP8A1A), mRNA
8913	21604	34748	0.98	2.0E-61	AV694317.1	EST_HUMAN	AV694317 GK6 Homo sapiens cDNA clone GKCELG06 5'
9462	22012		0.98	2.0E-61	AB011108.1	NT	Homo sapiens mRNA for KIAA0536 protein, partial cds
9822	22473	35678	1.67	2.0E-61	AW500256.1	EST_HUMAN	UI-HF-BNO-akd-4-12-Q-UJ.1 NIH_MGC 50 Homo sapiens cDNA clone IMAGE:3078774 5'
10150	22798	36014	2.3	2.0E-61	11421778	NT	Homo sapiens polymerase (RNA) III (DNA directed) (99kD) (RPOC39), mRNA
10789	23482		1.81	2.0E-61	11419729	NT	Homo sapiens ribosomal protein L44 (RPL44), mRNA
756	13528	26188	1.11	1.0E-61	5453629	NT	Homo sapiens origin recognition complex, subunit 2 (yeast homolog)-like (ORC2L), mRNA
1851	14589	27304	3.71	1.0E-61	6005683	NT	Homo sapiens zona pellucida glycoprotein 3A (sperm receptor) (ZP3A), mRNA
2193	14922	27658	1.42	1.0E-61	AW827261.1	EST_HUMAN	xn11b09.y1 NCL_CGAP_L15 Homo sapiens cDNA clone IMAGE:2693369 5' similar to contains element
2839	15607	28257	1.47	1.0E-61	BE386363.1	EST_HUMAN	MSR1 repetitive element:
3389	16128	28786	0.86	1.0E-61	7662319	NT	Homo sapiens KIAA0808 gene product (KIAA0808), mRNA
3715	16468	29105	1.2	1.0E-61	BE174453.1	EST_HUMAN	QV2-HT0577-140300-077-g06 HT0577 Homo sapiens cDNA
4407	17144	29773	0.81	1.0E-61	4759249	NT	Homo sapiens TRAF family member-associated NFKB activator (TANK) mRNA
4407	17144	29774	0.81	1.0E-61	4759249	NT	Homo sapiens TRAF family member-associated NFKB activator (TANK) mRNA
4804	17535	30157	8.11	1.0E-61	AW298181.1	EST_HUMAN	UI-H-BW0-aj-b-08-0-UJ.s1 NCL_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:2732871 3'
4804	17535	30158	8.11	1.0E-61	AW298181.1	EST_HUMAN	UI-H-BW0-aj-b-08-0-UJ.s1 NCL_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:2732871 3'
4805	17632	30247	0.75	1.0E-61	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
5309	18114	30772	1.62	1.0E-61	MT6423.1	NT	H. sapiens carbonic anhydrase VII (CA VII) gene, exons 4, 5, 6, and 7, and complete cds
5803	18398	31310	0.79	1.0E-61	7662303	NT	Homo sapiens KIAA0783 gene product (KIAA0783), mRNA
5793	18594	31511	1.29	1.0E-61	11418891	NT	Homo sapiens survival of motor neuron 1, telomeric (SMN1), mRNA
6800	19491	32482	7.11	1.0E-61	M30135.1	NT	Human P40 T-cell and mast cell growth factor (hP40) gene, complete cds
6991	19684	32732	0.67	1.0E-61	4759171	NT	Homo sapiens SC35-interacting protein 1 (SRRP129), mRNA
7091	19780	32845	1.42	1.0E-61	8923130	NT	Homo sapiens hypothetical protein FLJ20128 (FLJ20128), mRNA
7091	19780	32846	1.42	1.0E-61	8923130	NT	Homo sapiens hypothetical protein FLJ20128 (FLJ20128), mRNA
8033	20728	33861	3	1.0E-61	11034840	NT	Homo sapiens growth hormone releasing hormone (GHRH), mRNA
8212	20906	34041	3.06	1.0E-61	AF224699.1	NT	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
9182	21852		2.7	1.0E-61	AW689726.1	EST_HUMAN	MR0-BN0070-040400-010-H01 BN0070 Homo sapiens cDNA
9257	21936	35110	7.73	1.0E-61	11416280	NT	Homo sapiens cadherin 18 (CDH18), mRNA
9828	22576	35775	5.24	1.0E-61	11428892	NT	Homo sapiens KIAA0971 protein (KIAA0971), mRNA
10531	23228	36462	2.84	1.0E-61	11425578	NT	Homo sapiens actin, alpha 4 (ACTN4), mRNA

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10855	23535	36780	1.49	1.0E-61	AB044550.1	NT	Homo sapiens P/OKd.19 mRNA for ubiquitin-conjugating enzyme E2, complete cds
11006	23678	36935	1.53	1.0E-61	AB007830.1	NT	Homo sapiens mRNA for CSR2, complete cds
12007	25273	30728	3.02	1.0E-61	11430480	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
12007	25273	30727	3.02	1.0E-61	11430480	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
12659	24959	30988	11.56	1.0E-61	11418127	NT	Homo sapiens GTP binding protein 1 (GTPBP1), mRNA
10295	22803	36113	1.45	9.0E-62	BE084388.1	EST_HUMAN	RC4-BT0310-110300-015-t10 BT0310 Homo sapiens cDNA
4814	17249	29895	1.1	8.0E-62	AA530420.1	EST_HUMAN	cc68h11.s1 NCL CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1354725 3' similar to SW:POL_MLVRK
1085	13843	28501	1.62	7.0E-62	AV714334.1	EST_HUMAN	P31795 POL POLYPROTEIN ;
3497	16283	28907	0.74	7.0E-62	P17480	SWISSPROT	AV714334 DCB Homo sapiens cDNA clone DCBAMA08 5'
5828	18615	31547	0.64	7.0E-62	11427965	NT	NUCLEOLAR TRANSCRIPTION FACTOR 1 (UPSTREAM BINDING FACTOR 1) (UBF-1)
11323	24014	37317	7.1	7.0E-62	A1206881.1	EST_HUMAN	(AUTOANTIGEN NOR-90)
2898	15764		1.42	6.0E-62	U09410.1	NT	Homo sapiens hypodermal protein (FLJ20261), mRNA
3379	16138		4.1	6.0E-62	11418255	NT	qg56a04.x1 Scores_testis_NHT Homo sapiens cDNA clone IMAGE:1839150 3' similar to TR:O15103
7525	20198	33289	3.03	6.0E-62	A1762801.1	EST_HUMAN	O15103 HYPOTHETICAL 27.3 KD PROTEIN ;
7525	20198	33290	3.03	6.0E-62	A1762801.1	EST_HUMAN	Human zfc finger protein ZNF131 mRNA, partial cds
7984	20579		0.72	6.0E-62	AW501124.1	EST_HUMAN	Homo sapiens CGI-56 protein (CGI-56), mRNA
8155	20849	33981	1.45	6.0E-62	11431139	NT	wf04d02.x1 NCL CGAP_GCL1 Homo sapiens cDNA clone IMAGE:2389251 3'
9254	21833	35106	3.27	6.0E-62	AW814393.1	EST_HUMAN	wf04d02.x1 NCL CGAP_GCL1 Homo sapiens cDNA clone IMAGE:2389251 3'
							UI-HF-BPOp-elt-d-09-0-UJ11 NIH_MGC_51 Homo sapiens cDNA clone IMAGE:3072833 5'
407	13192	25940	2.8	5.0E-62	A1950528.1	EST_HUMAN	Homo sapiens CGI-18 protein (LOC51008), mRNA
2406	15127	27883	4.25	5.0E-62	AJ271735.1	NT	MR3-ST0203-130100-025-409 ST0203 Homo sapiens cDNA
2406	15127	27884	4.25	5.0E-62	AJ271735.1	NT	wf51e07.x1 NCL CGAP_Lu28 Homo sapiens cDNA clone IMAGE:2547204 3' similar to SW:GG95_HUMAN
2998	15312	28048	1.35	5.0E-62	U39487.1	NT	C08379 GOLGIN-96 ; contains element MER22 repetitive element ;
2698	15312	28049	1.36	5.0E-62	U39487.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
3413	16171	28820	2.92	5.0E-62	4506758	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
							Human xanthine dehydrogenase/oxidase mRNA, complete cds
4293	17032	29680	2.6	5.0E-62	AA431093.1	EST_HUMAN	Human xanthine dehydrogenase/oxidase mRNA, complete cds
8447	21139	34278	0.55	5.0E-62	4506758	NT	Homo sapiens ryandine receptor 3 (RYR3) mRNA
9417	22095	35287	6.45	5.0E-62	AW410687.1	EST_HUMAN	zw76e03.s1 Scores_testis_NHT Homo sapiens cDNA clone IMAGE:752344 3' similar to SW:NRDC_RAT
11231	23904	37180	2.85	5.0E-62	11425574	NT	P47245 NARDILYSIN ;
11231	23984	37181	2.85	5.0E-62	11425574	NT	Homo sapiens ryandine receptor 3 (RYR3) mRNA
							fn07g09.x1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:2961616 5'
							Homo sapiens muscle specific gene (M6), mRNA
							Homo sapiens muscle specific gene (M6), mRNA

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
820	13591	26258	1.95	4.0E-62	AW161478.1	EST_HUMAN	eu71d03.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2781701 5' similar to gb:M37104 ATP SYNTHASE COUPLING FACTOR 6, MITOCHONDRIAL PRECURSOR (HUMAN);
820	13591	26259	1.95	4.0E-62	AW161478.1	EST_HUMAN	eu71d03.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2781701 5' similar to gb:M37104 ATP SYNTHASE COUPLING FACTOR 6, MITOCHONDRIAL PRECURSOR (HUMAN);
821	13591	26258	2.98	4.0E-62	AW161478.1	EST_HUMAN	eu71d03.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2781701 5' similar to gb:M37104 ATP SYNTHASE COUPLING FACTOR 6, MITOCHONDRIAL PRECURSOR (HUMAN);
821	13591	26259	2.98	4.0E-62	AW161478.1	EST_HUMAN	eu71d03.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2781701 5' similar to gb:M37104 ATP SYNTHASE COUPLING FACTOR 6, MITOCHONDRIAL PRECURSOR (HUMAN);
2459	15177	27916	1.78	4.0E-62	A1827900.1	EST_HUMAN	wf12b08.x1 Soares_NFL_T_GBC S1 Homo sapiens cDNA clone IMAGE:2350359 3' similar to gb:X57138_mat1 HISTONE H2B.2 (HUMAN);
2459	15177	27917	1.78	4.0E-62	A1827900.1	EST_HUMAN	wf12b08.x1 Soares_NFL_T_GBC S1 Homo sapiens cDNA clone IMAGE:2350359 3' similar to gb:X57138_mat1 HISTONE H2B.2 (HUMAN);
3394	16153		6.34	4.0E-62	4557887	NT	Homo sapiens keratin 18 (KRT18) mRNA
5833	18622	31555	1.84	4.0E-62	4506878	NT	Homo sapiens ectate carrier family 13 (sodium-dependent dicarboxylate transporters), member 2 (SLC13A2) mRNA
6204	18979	31958	1.9	4.0E-62	11420854	NT	Homo sapiens ubiquitin specific protease 9, X chromosome (Drosophila fat facets related) (USP9X), mRNA
7071	19762	32826	1.84	4.0E-62	11421041	NT	Homo sapiens phosphoribosyl pyrophosphate synthetase 2 (PRPS2), mRNA
7534	20204	33289	2.48	4.0E-62	7657057	NT	Homo sapiens eukaryotic translation initiation factor 2B, subunit 2 (beta, 39kD) (EIF2B2), mRNA
7534	20204	33300	2.48	4.0E-62	7657057	NT	Homo sapiens eukaryotic translation initiation factor 2B, subunit 2 (beta, 39kD) (EIF2B2), mRNA
8071	20765	33894	1.06	4.0E-62	11428873	NT	Homo sapiens 26S proteasome-associated peptidyl homologue (POH1), mRNA
8745	21437	34584	4.87	4.0E-62	AB033089.1	NT	Homo sapiens mRNA for KIAA1263 protein, partial cds
10834	23614	36884	4.45	4.0E-62	278766.1	NT	H. sapiens flow-sorted chromosome 6 HindIII fragment, SO8pA16D3
10834	23614	36885	4.45	4.0E-62	278766.1	NT	H. sapiens flow-sorted chromosome 6 HindIII fragment, SO8pA16D3
11895	24533	37270	2.81	4.0E-62	11418085	NT	Homo sapiens putative nuclear protein (HIRHFB2122), mRNA
12590	24947	30984	1.34	4.0E-62	11418322	NT	Homo sapiens cadherin EGF LAG seven-pass G-type receptor 1 (CELSR1), mRNA
12845	24942	30981	16.72	4.0E-62	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
12845	24942	30982	16.72	4.0E-62	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
12845	24942	30983	2.72	4.0E-62	11430460	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
72	12899	28535	0.89	3.0E-62	4557794	NT	Homo sapiens neurofilament 2 (bilateral acoustic neuroma) (NF2) mRNA
3041	15807	28452	1.11	3.0E-62	AB040909.1	NT	Homo sapiens mRNA for KIAA1476 protein, partial cds
3041	15807	28453	1.11	3.0E-62	AB040909.1	NT	Homo sapiens mRNA for KIAA1476 protein, partial cds
3686	18439	29081	5.41	3.0E-62	X52858.1	NT	Human cyclophilin-related processed pseudogene

Table 4  
Single Exon Probes Expressed in Brain

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8438	21130	34287	5.82	3.0E-62	AF632733.1	EST_HUMAN	w633f0.4, x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2289903 3' similar to contains THR12
1209	13960	26627	2.36	2.0E-62	AL163284.2	NT	THR repetitive element;
8873	21365	34511	4.89	2.0E-62	BF329911.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C084
8873	21365	34512	4.89	2.0E-62	BF329911.1	EST_HUMAN	RCO-BN0284-300500-031-e05 BN0284 Homo sapiens cDNA
10072	22720		3.8	2.0E-62	AF224699.1	NT	RCO-BN0284-300500-031-e05 BN0284 Homo sapiens cDNA
11698	24284		4.81	2.0E-62	BF330676.1	EST_HUMAN	Homo sapiens microsomal, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
1021	13781	28443	1.87	1.0E-62	AF248540.1	NT	QV4-BT0257-081199-017-e03 BT0257 Homo sapiens cDNA
1536	14283	28970	11.01	1.0E-62	L78810.1	NT	Homo sapiens intersectin 2 (SH3D1B) mRNA, complete cds
1791	14531	27239	1.04	1.0E-62	AA625207.1	EST_HUMAN	Homo sapiens ADP/ATP carrier protein (ANT-2) gene, complete cds
2915	15681	28328	0.99	1.0E-62	AL039044.1	EST_HUMAN	Homo sapiens ADP/ATP carrier protein (ANT-2) gene, complete cds
4317	17056		0.71	1.0E-62	BE168413.1	EST_HUMAN	af70e11.1 Soares_NhiMFPu_S1 Homo sapiens cDNA clone IMAGE:1047404 5' similar to WP:K01H12.1
4490	17228	28855	1.57	1.0E-62	8923201	NT	CE03483;
5071	17790	30405	0.9	1.0E-62	L23503.1	NT	DKFZp666F104_j1 588 (synonym: hfid2) Homo sapiens cDNA clone DKFZp666F104 5'
							QV6-HT0483-280200-135-h12 HT0483 Homo sapiens cDNA
							Homo sapiens hypothetical protein FLJ20212 (FLJ20212), mRNA
							Human glucagon-like peptide-1 receptor (GLP-1) mRNA, complete cds
							Homo sapiens X28 region near ALD locus containing dual specificity phosphatase 9 (DUSP9), ribosomal protein L18a (RPL18a), Ca2+/Calmodulin-dependent protein kinase I (CAMKI), creatine transporter (CRTR), CDM protein (CDM), adrenoleukodystrophy protein >
6198	18972	31948	0.98	1.0E-62	U52111.2	NT	ab0502.2.s1 Strabagene fetal retina 937202 Homo sapiens cDNA clone IMAGE:839008 3'
7034	19726	32782	0.91	1.0E-62	AA400060.1	EST_HUMAN	zg89f10.s1 Soares_fetal_heart_NbHH19W Homo sapiens cDNA clone IMAGE:409771 3'
7045	19736	32798	2.94	1.0E-62	AA722878.1	EST_HUMAN	zg89f10.s1 Soares_fetal_heart_NbHH19W Homo sapiens cDNA clone IMAGE:409771 3'
7045	19736	32797	2.94	1.0E-62	AA722878.1	EST_HUMAN	zg89f10.s1 Soares_fetal_heart_NbHH19W Homo sapiens cDNA clone IMAGE:409771 3'
8655	21347	34491	0.5	1.0E-62	AA280050.1	EST_HUMAN	zs93e07.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:705080 5'
8956	21647	34797	2.13	1.0E-62	7862289	NT	Homo sapiens KIAA0763 gene product (KIAA0763), mRNA
8956	21647	34798	2.13	1.0E-62	7862289	NT	Homo sapiens KIAA0763 gene product (KIAA0763), mRNA
8956	21689	34838	2.02	1.0E-62	X15533.1	NT	H. sapiens lysosomal acid phosphatase gene (EC 3.1.3.2) Exon 9
8956	21689	34839	2.02	1.0E-62	X15533.1	NT	H. sapiens lysosomal acid phosphatase gene (EC 3.1.3.2) Exon 9
8457	22007	35177	3.54	1.0E-62	AA495170.1	EST_HUMAN	aa33d08.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:815055 3'
11339	24029	37333	2.01	1.0E-62	Z78698.1	NT	H. sapiens flow-sorted chromosome 6 HindIII fragment, SC3pA14D8
11866	24450	37762	1.52	1.0E-62	11424055	NT	Homo sapiens exosome component Rrp48 (LOC58915), mRNA
12474	24838		2.25	1.0E-62	11418322	NT	Homo sapiens cadherin EGF LAG seven-pass G-type receptor 1 (CELSR1), mRNA
12673	24966	30690	2.99	1.0E-62	11430460	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
329	13130	25765	2.59	9.0E-63	AW816405.1	EST_HUMAN	QV4-ST0234-181199-037-405 ST0234 Homo sapiens cDNA
2345	15086		1.53	9.0E-63	C18159.1	EST_HUMAN	C18159 Human placenta cDNA (TFJwara) Homo sapiens cDNA clone GEN-558C10 5'

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4020	16706	28395	7.42	9.0E-63	AB02348.2	NT	Homo sapiens mRNA for KIAA0350 protein, partial cds
4020	16706	29398	7.42	9.0E-63	AB02348.2	NT	Homo sapiens mRNA for KIAA0350 protein, partial cds
5164	17895	37798	3.05	9.0E-63	11418186	NT	Homo sapiens acinifase 2, mitochondrial (ACO2), mRNA
5379	18179	30868	1.03	9.0E-63	Y15056.1	NT	Homo sapiens mRNA for PKB kinase
7082	19772	32837	3.86	9.0E-63	11428085	NT	Homo sapiens nucleoporin 88kD (NUP88), mRNA
7724	20387	33501	0.91	9.0E-63	4895544	NT	Homo sapiens pyruvate dehydrogenase kinase, isoenzyme 3 (PDK3) mRNA
8224	20918	34053	1.38	9.0E-63	11421190	NT	Homo sapiens Ras association (RalGDS/AF-8) domain family 2 (RASSF2), mRNA
10816	23499	36736	2.03	9.0E-63	7682289	NT	Homo sapiens KIAA0763 gene product (KIAA0763), mRNA
10816	23499	36737	2.03	9.0E-63	7682289	NT	Homo sapiens KIAA0763 gene product (KIAA0763), mRNA
2343	15086	27803	1.32	8.0E-63	4537734	NT	Homo sapiens monoamine oxidase A (MAOA), nuclear gene encoding mitochondrial protein, mRNA
2373	15086	27834	2.08	8.0E-63	5031810	NT	Homo sapiens IL-2-inducible T-cell kinase (ITK), mRNA
3454	16210	28961	3.02	8.0E-63	AF198349.1	NT	Gallus gallus Dach2 protein (Dach2) mRNA, complete cds
3454	16210	28962	3.02	8.0E-63	AF198349.1	NT	Gallus gallus Dach2 protein (Dach2) mRNA, complete cds
4234	16975	29600	3.31	8.0E-63	AL163268.2	NT	Homo sapiens chromosome 21 segment HS21C068
908	13675		2.09	7.0E-63	AJ872137.1	EST_HUMAN	nm55g11.x1 NCL CGAP_U12 Homo sapiens cDNA clone IMAGE:2439808 3'
5255	18061		48.05	6.0E-63	AA420803.1	EST_HUMAN	nc03102.1 NCL CGAP_P11 Homo sapiens cDNA clone IMAGE:745947 similar to gb:Y00361 80S
8773	21465	34612	1.97	5.0E-63	11528464	NT	RIBOSOMAL PROTEIN (HUMAN);
3315	16075	28726	0.84	4.0E-63	AL163278.2	NT	Homo sapiens G protein-coupled receptor 51 (GPR51), mRNA
3788	16540	29174	1.16	4.0E-63	AB014607.1	NT	Homo sapiens chromosome 21 segment HS21C078
3788	16540	29175	1.16	4.0E-63	AB014607.1	NT	Homo sapiens mRNA for KIAA0707 protein, partial cds
6353	19123	32115	3.64	4.0E-63	AW750372.1	EST_HUMAN	Homo sapiens mRNA for KIAA0707 protein, partial cds
6353	19123	32116	3.64	4.0E-63	AW750372.1	EST_HUMAN	GM3-BT0595-180100-072-009 BT0595 Homo sapiens cDNA
11077	23747	37021	2.3	4.0E-63	AW134709.1	EST_HUMAN	GM3-BT0595-180100-072-009 BT0595 Homo sapiens cDNA
11077	23747	37022	2.3	4.0E-63	AW134709.1	EST_HUMAN	UI-H-B11-abq-e-02-Q-UI.s1 NCL CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2712482 3'
11846	24430	37771	4.32	4.0E-63	AA362834.1	EST_HUMAN	UI-H-B11-abq-e-02-Q-UI.s1 NCL CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2712482 3'
1928	14684	27377	2.82	3.0E-63	AB018280.1	NT	EST72607 Ovary II Homo sapiens cDNA 5' end similar to zinc finger protein family
2782	15487	28225	2.26	3.0E-63	J00310.1	NT	Homo sapiens mRNA for KIAA0717 protein, partial cds
2824	13987	28638	11.81	3.0E-63	6005593	NT	Human Met-RNA-i gene 1
6382	19151	32160	32.78	3.0E-63	11545810	NT	Homo sapiens zinc finger protein 144 (ZNF144), mRNA
9005	22258	35444	1.15	3.0E-63	BE876158.1	EST_HUMAN	Homo sapiens hepatocellular carcinoma antigen gene 520 (LOC33928), mRNA
9005	22258	35445	1.15	3.0E-63	BE876158.1	EST_HUMAN	601485666F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3888253 5'
186	12689	25639	1.09	2.0E-63	U07804.1	NT	601485666F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3888253 5'
							Human DNA topoisomerase I mRNA, partial cds

Table 4  
Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
193	13008	25847	1.68	2.0E-63	4885228	NT	Homo sapiens eyes absent (Drosophila) homolog 2 (EYA2), mRNA
485	13270		2.34	2.0E-63	4557824	NT	Homo sapiens glutamate-cysteine ligase (gamma-glutamylcysteine synthetase), catalytic (72.8kD) (GLCLC) mRNA
807	13578	26244	5.57	2.0E-63	7657042	NT	Homo sapiens Down syndrome candidate region 1 (DSCR1), mRNA
1559	14308	26984	1.43	2.0E-63	AB030388.1	NT	Homo sapiens RHCE mRNA for Rh blood CE group antigen polypeptide, complete cds
1559	14308	26985	1.43	2.0E-63	AB030388.1	NT	Homo sapiens RHCE mRNA for Rh blood CE group antigen polypeptide, complete cds
1780	14502	27203	1.1	2.0E-63	BE410739.1	EST_HUMAN	901301627F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:36836103 5'
3154	15917	28563	3.44	2.0E-63	4502168	NT	Homo sapiens amyloid beta (A4) precursor protein (probable nadin-II, Alzheimer disease) (APP), mRNA
3279	16040	28690	2.02	2.0E-63	AF109718.1	NT	Homo sapiens chromosome 3 subtelomeric region
3885	16635	29274	3.74	2.0E-63	L39891.1	NT	Homo sapiens polycystic kidney disease-associated protein (PKD1) gene, complete cds
4813	17544	30199	1	2.0E-63	AF111167.2	NT	Homo sapiens Jun dimerization protein gene, partial cds; cfos gene, complete cds; and unknown gene
5038	17818	30435	0.96	2.0E-63	6912617	NT	Homo sapiens glutamyl-peptide cyclotransferase (glutathionyl cyclase) (QPCT), mRNA
5181	25062	30505	1.25	2.0E-63	11419428	NT	Homo sapiens similar to ecdysectoida pyrophosphatase/phosphodiesterase 3 (H. sapiens) (LOC63214), mRNA
5794	18585	31512	2.96	2.0E-63	BF373541.1	EST_HUMAN	QV1-FT0170-040700-265-c05 FT0170 Homo sapiens cDNA
5794	18585	31513	2.96	2.0E-63	BF373541.1	EST_HUMAN	QV1-FT0170-040700-265-c05 FT0170 Homo sapiens cDNA
6093	18871	31837	0.84	2.0E-63	11421940	NT	Homo sapiens protein kinase, cAMP-dependent, regulatory, type II, beta (PRKAR2B), mRNA
6093	18871	31838	0.84	2.0E-63	11421940	NT	Homo sapiens protein kinase, cAMP-dependent, regulatory, type II, beta (PRKAR2B), mRNA
6902	19365	32378	1.67	2.0E-63	U69059.1	NT	Human gamma T-cell receptor beta chain Dopamine-beta-hydroxylase-like, TRY1, TRY2, TRY3, TCRBV27S1P, TCRBV22S1A2NT, TCRBV6S1A1T, TCRBV7S1A1N2T, TCRBV5S1A1T, TCRBV13S3, TCRBV6S7P, TCRBV7S3A2T, TCRBV13S2A1T, TCRBV6S2A2PT, TCRBV7S2A1N4T, TCRBV13S9/13S>
6949	19411	32425	0.88	2.0E-63	AB032368.1	NT	Homo sapiens MIST mRNA, partial cds
6949	19411	32426	0.88	2.0E-63	AB032368.1	NT	Homo sapiens MIST mRNA, partial cds
6975	19456	32477	1.45	2.0E-63	9910395	NT	Homo sapiens Carbonic anhydrase-related protein 10 (LOC55834), mRNA
6975	19456	32478	1.45	2.0E-63	9910395	NT	Homo sapiens Carbonic anhydrase-related protein 10 (LOC55834), mRNA
7678	20342	33454	0.87	2.0E-63	AB048844.1	NT	Homo sapiens mRNA for KIAA1624 protein, partial cds
7713	20377	33490	0.56	2.0E-63	11421514	NT	Homo sapiens similar to serine domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3A (H. sapiens) (LOC63232), mRNA
8431	21124	34292	3.96	2.0E-63	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
8952	21643	34791	1.35	2.0E-63	11420949	NT	Homo sapiens kinesin family member 3B (KIF3B), mRNA
8952	21643	34792	1.35	2.0E-63	11420949	NT	Homo sapiens kinesin family member 3B (KIF3B), mRNA

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9839	22490	35891	1.12	2.0E-63	AL163218.2	NT	Homo sapiens chromosome 21 segment HS21C018
10647	23338	36577	6.43	2.0E-63	N78946.1	EST_HUMAN	zbt18b05.e1 Scores fetal Jurk NIH-L19W Homo sapiens cDNA clone IMAGE:302385 3' similar to gb:U17208 40S RIBOSOMAL PROTEIN S4 (HUMAN);
10672	23363	36604	2.98	2.0E-63	AF098810.1	NT	Homo sapiens neuron III-alpha gene, partial cds
10672	23363	36605	2.98	2.0E-63	AF098810.1	NT	Homo sapiens neuron III-alpha gene, partial cds
12098	26177	30807	6.97	2.0E-63	11418185	NT	Homo sapiens acntess 2, mitochondrial (AC02), mRNA
1802	14248	26834	1.28	1.0E-63	F08485.1	EST_HUMAN	HSCZVD111 normalized infant brain cDNA Homo sapiens cDNA clone c-zvd11
1802	14248	26835	1.28	1.0E-63	F08485.1	EST_HUMAN	HSCZVD111 normalized infant brain cDNA Homo sapiens cDNA clone c-zvd11
4308	17047	29672	2.82	1.0E-63	F08485.1	EST_HUMAN	HSCZVD111 normalized infant brain cDNA Homo sapiens cDNA clone c-zvd11
4308	17047	29673	2.82	1.0E-63	F08485.1	EST_HUMAN	HSCZVD111 normalized infant brain cDNA Homo sapiens cDNA clone c-zvd11
5288	18074	30703	0.8	1.0E-63	AJ271736.1	NT	Homo sapiens Xq pseudosubclonal region; segment 2/2
5883	18478	31394	1.4	1.0E-63	AW582288.1	EST_HUMAN	QV6-ST0215-060100-083-509 ST0215 Homo sapiens cDNA
6298	19071	32056	0.68	1.0E-63	AW451850.1	EST_HUMAN	UHH-B19-att-H-02-0-U1.s1 NCI CGAP Sub5 Homo sapiens cDNA clone IMAGE:3068763 3'
6298	19071	32056	0.68	1.0E-63	AW451850.1	EST_HUMAN	UHH-B19-att-H-02-0-U1.s1 NCI CGAP Sub5 Homo sapiens cDNA clone IMAGE:3068763 3'
8371	21064		2.68	1.0E-63	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
12737	25286		4.04	1.0E-63	AL163207.2	NT	Homo sapiens chromosome 21 segment HS21C007
7768	20462	33586	4.36	9.0E-64	AJ478186.1	EST_HUMAN	tm50607.x1 NCI CGAP Kd11 Homo sapiens cDNA clone IMAGE:2161626 3'
1024	13784		6.16	8.0E-64	BE280798.1	EST_HUMAN	601155232F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3139038 5'
6048	18829	31792	3.88	8.0E-64	BE885755.1	EST_HUMAN	601508988F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3910336 5'
11916	24479		7.34	8.0E-64	11418177	NT	Homo sapiens Ran GTPase activating protein 1 (RANGAP1), mRNA
11970	24518		1.6	8.0E-64	T00651.1	EST_HUMAN	y698b02J1 Strategene lung (#637210) Homo sapiens cDNA clone IMAGE:78179 5'
3520	16276		1.13	7.0E-64	BE394321.1	EST_HUMAN	601311455F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3633204 5'
4683	17417	30052	2.73	7.0E-64	4507490	NT	Homo sapiens thimet oligopeptidase 1 (THOP1) mRNA
4683	17417	30053	2.73	7.0E-64	4507490	NT	Homo sapiens thimet oligopeptidase 1 (THOP1) mRNA
8933	22581	35778	3.43	7.0E-64	Y07848.1	NT	Homo sapiens EWS, ger22, np22 and bam22 genes
1716	14459	27159	1.63	6.0E-64	AJ651892.1	EST_HUMAN	wb51e07.x1 NCI CGAP_G08 Homo sapiens cDNA clone IMAGE:2308220 3' similar to gb:M15182 BETA-GLUCURONIDASE PRECURSOR (HUMAN);
1716	14459	27157	1.63	6.0E-64	AJ651892.1	EST_HUMAN	wb51e07.x1 NCI CGAP_G08 Homo sapiens cDNA clone IMAGE:2308220 3' similar to gb:M15182 BETA-GLUCURONIDASE PRECURSOR (HUMAN);
3120	15885	28524	4.39	6.0E-64	AW026445.1	EST_HUMAN	wv13e03.x1 NCI CGAP_Bm23 Homo sapiens cDNA clone IMAGE:2529436 3'
3120	15885	28525	4.39	6.0E-64	AW026445.1	EST_HUMAN	wv13e03.x1 NCI CGAP_Bm23 Homo sapiens cDNA clone IMAGE:2529436 3'
5534	18332	31237	2.46	6.0E-64	Y18993.1	NT	Homo sapiens MCP-1 gene and enhancer region
5534	18332	31238	2.46	6.0E-64	Y18993.1	NT	Homo sapiens MCP-1 gene and enhancer region
5555	18352	31281	4.08	6.0E-64	M13975.1	NT	Homo sapiens protein kinase C beta-II type (PRKCB1) mRNA, complete cds

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Table 4  
Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5584	18361	31289	1.26	6.0E-64	6012461	NT	Homo sapiens atrophin-1 interacting protein 1 (KIAA0705), mRNA
5739	18331	31453	0.82	6.0E-64	11422189	NT	Homo sapiens caldinin receptor (CALOR), mRNA
5739	18331	31454	0.82	6.0E-64	11422189	NT	Homo sapiens caldinin receptor (CALOR), mRNA
7136	18823	32889	2.34	6.0E-64	11626879	NT	Homo sapiens mesenchyme homeo box 1 (MEOX1), mRNA
7136	18823	32890	2.34	6.0E-64	11626879	NT	Homo sapiens mesenchyme homeo box 1 (MEOX1), mRNA
9226	21905	35077	6.76	6.0E-64	11420555	NT	Homo sapiens acetyl-CoA synthetase (LOC55902), mRNA
9406	22068	36240	2.09	6.0E-64	AF274763.1	NT	Homo sapiens progressive ankylosis-like protein (ANK), mRNA, complete cds
9618	22271	35458	2.78	6.0E-64	S70475.1	NT	tRNC [human, brain, mRNA, 2715 nt]
10689	23360	36600	6.01	6.0E-64	11420197	NT	Homo sapiens stromal antigen 3 (STAG3), mRNA
10689	23360	36601	6.01	6.0E-64	11420197	NT	Homo sapiens stromal antigen 3 (STAG3), mRNA
10941	15885	28524	1.84	6.0E-64	AW028445.1	EST_HUMAN	wf13603.x1 NCI_CGAP_Bm23 Homo sapiens cDNA clone IMAGE:2629436 3'
10941	15885	28525	1.84	6.0E-64	AW028445.1	EST_HUMAN	wf13603.x1 NCI_CGAP_Bm23 Homo sapiens cDNA clone IMAGE:2629436 3'
12116	24608	31089	4.97	6.0E-64	11528188	NT	Homo sapiens Interleukin 10 receptor, beta (IL-10RB), mRNA
801	13573	26235	2.85	5.0E-64	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
801	13573	26236	2.85	5.0E-64	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
1315	14064	26738	1.84	5.0E-64	AB020710.1	NT	Homo sapiens mRNA for KIAA0903 protein, partial cds
1401	14148	26827	1.3	5.0E-64	L40833.1	NT	Homo sapiens phosphoglucomutase-related protein (PGMRP) gene, complete cds
1401	14148	26828	1.3	5.0E-64	L40833.1	NT	Homo sapiens phosphoglucomutase-related protein (PGMRP) gene, complete cds
1708	14449	27149	1.37	5.0E-64	U89358.1	NT	Human K3 myb protein homolog mRNA, complete cds
2829	14210	26897	4.85	5.0E-64	7682205	NT	Homo sapiens KIAA0618 gene product (KIAA0618), mRNA
2829	14210	26898	4.85	5.0E-64	7682205	NT	Homo sapiens KIAA0618 gene product (KIAA0618), mRNA
3940	16690	28328	6.71	5.0E-64	AF017433.1	NT	Homo sapiens putative transcription factor CR53 (CR53) mRNA, partial cds
4085	18828	29455	1.05	5.0E-64	AB020710.1	NT	Homo sapiens mRNA for KIAA0903 protein, partial cds
7716	20380	33483	0.58	4.0E-64	BE794607.1	EST_HUMAN	RC3-ST0197-120200-015-a03 ST0197 Homo sapiens cDNA
10715	23404	36844	2.23	4.0E-64	AW813783.1	EST_HUMAN	RC3-ST0197-120200-015-a03 ST0197 Homo sapiens cDNA
10715	23404	36845	2.23	4.0E-64	AW813783.1	EST_HUMAN	RC3-ST0197-120200-015-a03 ST0197 Homo sapiens cDNA
2195	14924	27658	5.41	3.0E-64	G18995.1	EST_HUMAN	C18995 Human placenta cDNA (TFujwara) Homo sapiens cDNA clone GEN-568E02 5'
3249	18011	28662	0.89	3.0E-64	BE794381.1	EST_HUMAN	60158855F1 NIH_MGC 7 Homo sapiens cDNA clone IMAGE:3943577 5'
3436	18192	28841	2.22	3.0E-64	AV711714.1	EST_HUMAN	AV711714 DCA Homo sapiens cDNA clone DCAAMC01 5'
3436	18192	28842	2.22	3.0E-64	AV711714.1	EST_HUMAN	AV711714 DCA Homo sapiens cDNA clone DCAAMC01 5'
5990	18771	31734	1.21	3.0E-64	Z26273.1	NT	H. sapiens isoform 1 gene for L-type calcium channel, exon 28
6401	19170	32189	3.34	3.0E-64	BF370000.1	EST_HUMAN	RC8-FN0019-290800-011-G11 FN0019 Homo sapiens cDNA
8395	21058	34186	1.93	3.0E-64	AF248953.1	NT	Homo sapiens golgi matrix protein GM130 (GOLGA2) mRNA, complete cds



Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8365	21068	34199	1.93	3.0E-04	AF248953.1	NT	Homo sapiens golgi matrix protein GM130 (GOLGA2) mRNA, complete cds
8363	21086	34220	3.69	3.0E-04	BE206521.1	EST_HUMAN	bb72h12.y1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3047975 5' similar to gb:L08069 DNAJ PROTEIN HOMOLOG 2 (HUMAN);
8363	21086	34221	3.69	3.0E-04	BE206521.1	EST_HUMAN	bb72h12.y1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3047975 5' similar to gb:L08069 DNAJ
9327	21994	35165	1.54	3.0E-04	AL163246.2	NT	PROTEIN HOMOLOG 2 (HUMAN);
9327	21994	35166	1.54	3.0E-04	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
9414	22092	35263	0.9	3.0E-04	AW977384.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C046
9414	22092	35284	0.6	3.0E-04	AW977384.1	EST_HUMAN	EST389463 IMAGE resequenced, MAGO Homo sapiens cDNA
11691	24286	37608	1.8	3.0E-04	AL163227.2	NT	EST389463 IMAGE resequenced, MAGO Homo sapiens cDNA
1066	13824	26484	1.64	2.0E-04	AA609940.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C027
1377	14125	26799	1.54	2.0E-04	4757701	NT	af03d08.a1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1031151 3'
2628	15244		1.82	2.0E-04	AI927030.1	EST_HUMAN	Homo sapiens eIF4E-like cap-binding protein (4EHP) mRNA
2533	15248	27987	2.05	2.0E-04	AL163246.2	NT	wb87b01.x1 NCI_CGAP_Kd11 Homo sapiens cDNA clone IMAGE:2462281 3' similar to contains element L1 repetitive element;
2533	15248	27988	2.05	2.0E-04	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
3137	15901	28546	1.42	2.0E-04	4504088	NT	Homo sapiens chromosome 21 segment HS21C046
3767	16519	29157	0.78	2.0E-04	AW958145.1	EST_HUMAN	Homo sapiens glutamic-oxaloacetic transaminase 2, mitochondrial (aspartate aminotransferase 2) (GOT2), nuclear gene encoding mitochondrial protein, mRNA
3767	16519	29158	0.78	2.0E-04	AW958145.1	EST_HUMAN	EST370215 IMAGE resequenced, MAGO Homo sapiens cDNA
5916	18701	31655	2.78	2.0E-04	AU124387.1	EST_HUMAN	EST370215 IMAGE resequenced, MAGO Homo sapiens cDNA
6148	18925	31895	1.47	2.0E-04	AF113708.1	NT	AU124387 NT2RM2 Homo sapiens cDNA clone NT2RM2002113 5'
6394	19163	32184	5.21	2.0E-04	BF668537.1	EST_HUMAN	Homo sapiens angiotensin 4 (ANG4) mRNA, partial cds
6497	18283	32284	1.16	2.0E-04	AI078387.1	EST_HUMAN	602123474F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4280395 5'
6601	19364	32378	4.54	2.0E-04	M77185.1	NT	602123474F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4280395 5'
7707	20371	33484	0.7	2.0E-04	11431054	NT	602123474F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4280395 5'
7732	20395	33510	0.65	2.0E-04	AW606785.1	EST_HUMAN	602123474F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4280395 5'
8567	21259	34395	0.73	2.0E-04	11434008	NT	Homo sapiens dopamine receptor D5 pseudogene 1, partial cds
8567	21259	34396	0.73	2.0E-04	11434008	NT	Homo sapiens ataxin 2-binding protein 1 (A2BP1), mRNA
9038	21728	34882	0.56	2.0E-04	11432508	NT	QV1-HT0413-010200-059-h12 HT0413 Homo sapiens cDNA
9130	21818	34984	0.97	2.0E-04	AU132570.1	EST_HUMAN	Homo sapiens lymphocyte cytosolic protein 1 (L-plastin) (LCP1), mRNA
9879	22529	35726	0.59	2.0E-04	T06397.1	EST_HUMAN	Homo sapiens lymphocyte cytosolic protein 1 (L-plastin) (LCP1), mRNA
9879	22529	35727	0.59	2.0E-04	T06397.1	EST_HUMAN	Homo sapiens lymphocyte cytosolic protein 1 (L-plastin) (LCP1), mRNA
10662	23553	36592	3.72	2.0E-04	BF628114.1	EST_HUMAN	Homo sapiens lymphocyte cytosolic protein 1 (L-plastin) (LCP1), mRNA

Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10981	23656	36909	5.97	2.0E-04	A1922811.1	EST_HUMAN	wn81b06.x1 NCI_CGAP_UK1 Homo sapiens cDNA clone IMAGE:2452211 3'
10981	23656	36910	5.97	2.0E-04	A1922811.1	EST_HUMAN	wn81b06.x1 NCI_CGAP_UK1 Homo sapiens cDNA clone IMAGE:2452211 3'
11198	23863	37149	1.76	2.0E-04	AW864773.1	EST_HUMAN	PM2-SN0018-220300-002-e12 SN0018 Homo sapiens cDNA
12039	24562	31114	1.66	2.0E-04	8567387	NT	Homo sapiens period (Drosophila) homolog 3 (PER3), mRNA
12468	24834		4.85	2.0E-04	H55162.1	EST_HUMAN	CHR220101 Chromosome 22 exon Homo sapiens cDNA clone C22_132 5'
251	13060	25698	2.94	1.0E-04	AF231919.1	NT	Homo sapiens chromosome 22 unknown mRNA
1772	14514	27214	10.45	1.0E-04	A1929419.1	EST_HUMAN	au60c01.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2519136 3' similar to gb:121668_cds1 PROTHYMOSIN ALPHA (HUMAN); contains element MSR1 repetitive element :
3010	15776	28426	0.79	1.0E-04	4507334	NT	Homo sapiens synaptobrevin 1 (SYN1), mRNA
3501	16267	28912	5.74	1.0E-04	AF196778.1	NT	Homo sapiens transcription factor IGHM enhancer 3, JM11 protein, JM4 protein, JM5 protein, T54 protein, JM10 protein, A4 differentiation-dependent protein, triple LIM domain protein 6, and synaptophysin genes, complete cds; and L-type calcium channel $\alpha$ -
3572	16327	28974	1.27	1.0E-04	AF228527.1	NT	Homo sapiens TRIAD3 mRNA, partial cds
3572	16327	28976	1.27	1.0E-04	AF228527.1	NT	Homo sapiens TRIAD3 mRNA, partial cds
3881	16631	29270	0.79	1.0E-04	8922829	NT	Homo sapiens TRIAD3 mRNA, partial cds
9084	22812	35816	1.07	1.0E-04	AA042975.1	EST_HUMAN	Homo sapiens hypothetical protein FLJ11028 (FLJ11028), mRNA
12012	24545		1.81	1.0E-04	AL163248.2	NT	z65308.s1 Soares_pregnant uterus_NbHPU Homo sapiens cDNA clone IMAGE:496567 3'
2274	15000	27738	1.63	9.0E-05	X89211.1	NT	Homo sapiens chromosome 21 segment HS21C046
2274	15000	27739	1.63	9.0E-05	X89211.1	NT	H. sapiens DNA for endogenous retroviral like element
11523	24123		10.43	9.0E-05	BF330676.1	EST_HUMAN	H. sapiens DNA for endogenous retroviral like element
11493	24094	37405	10.87	8.0E-05	A1929244.1	EST_HUMAN	QV4-BT0257-081199-017-003 BT0257 Homo sapiens cDNA
10056	22703	35621	2.01	7.0E-05	BE081653.1	EST_HUMAN	au63h07.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2519005 3' similar to SW:RL21 HUMAN P46778 60S RIBOSOMAL PROTEIN L21. ;
11807	24397	37731	1.27	7.0E-05	Z21378.1	EST_HUMAN	QV2-BT0635-240400-162-002 BT0635 Homo sapiens cDNA
1034	13794	29454	3.59	6.0E-05	AV721896.1	EST_HUMAN	HSAAAEAWO TEST1, Human adult Testis tissue Homo sapiens cDNA clone cam test946 (b)
1915	14852		4.73	6.0E-05	AA550026.1	EST_HUMAN	AV721898 HTB Homo sapiens cDNA clone HTBBZC06 5'
6475	19242	32242	0.62	6.0E-05	AA503992.1	EST_HUMAN	ribosomal protein L32 (HUMAN); ribosomal protein L32 (HUMAN);
8645	21337	34481	2.3	6.0E-05	AW063262.1	EST_HUMAN	ribosomal protein L32 (HUMAN); ribosomal protein L32 (HUMAN);
8909	21600	34742	3.46	6.0E-05	AA427878.1	EST_HUMAN	ribosomal protein L32 (HUMAN); ribosomal protein L32 (HUMAN);
8909	21600	34743	3.46	6.0E-05	AA427878.1	EST_HUMAN	ribosomal protein L32 (HUMAN); ribosomal protein L32 (HUMAN);
8973	21663	34814	0.81	6.0E-05	A1085314.1	EST_HUMAN	ribosomal protein L32 (HUMAN); ribosomal protein L32 (HUMAN);

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8973	21863	34815	0.81	6.0E-65	AI085314.1	EST_HUMAN	qf18h05.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:1750425 3'
10783	23486	36707	3.82	6.0E-65	BE567816.1	EST_HUMAN	601340483F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3682877 5'
10968	23644	36897	1.52	6.0E-65	BF340825.1	EST_HUMAN	602037721F1 NCI_CGAP_Bm84 Homo sapiens cDNA clone IMAGE:4185677 5'
11480	24081	37392	1.86	6.0E-65	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
1331	14080	26754	1.6	5.0E-65	7661951	NT	Homo sapiens KIAA0156 gene product (KIAA0156), mRNA
1331	14080	26755	1.6	5.0E-65	7661951	NT	Homo sapiens KIAA0156 gene product (KIAA0156), mRNA
2151	14881	27615	1.6	5.0E-65	AB033786.1	NT	Homo sapiens HPAD-colony10 mRNA for peptidylarginine deiminase type I, complete cds
3250	16012	28683	1.6	5.0E-65	4507848	NT	Homo sapiens ubiquitin specific protease 13 (isopeptidase T-3) (USP13) mRNA
3250	16012	28684	1.6	5.0E-65	4507848	NT	Homo sapiens ubiquitin specific protease 13 (isopeptidase T-3) (USP13) mRNA
10364	23011	36226	1.01	5.0E-65	AF009668.1	NT	Homo sapiens ubiquitin specific protease 13 (isopeptidase T-3) (USP13) mRNA
188	13001	25642	2.02	4.0E-65	AL120419.1	EST_HUMAN	Multiple sclerosis associated retrovirus polyprotein (pd) mRNA, partial cds
728	13502	26156	1.37	4.0E-65	AI266468.1	EST_HUMAN	DKFZp761G108_r1 761 (synonym: hamy2) Homo sapiens cDNA clone DKFZp761G108 5'
728	13502	26157	1.37	4.0E-65	AI266468.1	EST_HUMAN	qm46e01.x1 Soares_placenta_8tc6weeks_2NblHP8tc6W Homo sapiens cDNA clone IMAGE:1891800 3'
1058	13814	26475	1.38	4.0E-65	4826735	NT	qm46e01.x1 Soares_placenta_8tc6weeks_2NblHP8tc6W Homo sapiens cDNA clone IMAGE:1891800 3'
1469	14216	26903	11.06	4.0E-65	4506636	NT	Homo sapiens fragile X mental retardation, autosomal homolog 1 (FXR1), mRNA
2336	15060	27796	0.91	4.0E-65	BE221469.1	EST_HUMAN	Homo sapiens ribosomal protein L34 (RPL34) mRNA
2336	15060	27797	0.91	4.0E-65	BE221469.1	EST_HUMAN	hu25e04.x1 NCI_CGAP_Mel15 Homo sapiens cDNA clone IMAGE:3171102 3'
3690	16680	26321	1.08	4.0E-65	AW993185.1	EST_HUMAN	hu25e04.x1 NCI_CGAP_Mel15 Homo sapiens cDNA clone IMAGE:3171102 3'
5124	17842	30459	1.03	4.0E-65	9055289	NT	RC2-BN0033-180200-019-003 BN0033 Homo sapiens cDNA
5124	17842	30460	1.03	4.0E-65	9055289	NT	Homo sapiens low density lipoprotein receptor related protein-deleted in tumor (LRPDI7), mRNA
6063	18842	31804	4.6	4.0E-65	AB033093.1	NT	Homo sapiens low density lipoprotein receptor related protein-deleted in tumor (LRPDI7), mRNA
6063	18842	31805	4.6	4.0E-65	AB033093.1	NT	Homo sapiens mRNA for KIAA1267 protein, partial cds
6983	19676	32723	0.55	4.0E-65	AY008372.1	NT	Homo sapiens mRNA for KIAA1267 protein, partial cds
7017	19709	32785	0.97	4.0E-65	M19879.1	NT	Homo sapiens oxysterol binding protein-related protein 3 (ORP3) mRNA, complete cds
7119	19807	32873	2.52	4.0E-65	11545780	NT	Human clathrin 27 gene, exons 10 and 11, and L1 and Alu repeats
7448	20124	33215	0.97	4.0E-65	U40372.1	NT	Homo sapiens hypothetical protein FLJ22087 (FLJ22087), mRNA
7448	20124	33216	0.97	4.0E-65	U40372.1	NT	Human 3',5' cyclic nucleotide phosphodiesterase (HSPDE1C3A) mRNA, partial cds
7741	20437	33558	1.86	4.0E-65	5453765	NT	Human 3',5' cyclic nucleotide phosphodiesterase (HSPDE1C3A) mRNA, partial cds
7741	20437	33559	1.86	4.0E-65	5453765	NT	Homo sapiens nel (chicken)-like 2 (NELL2), mRNA
9044	21734	34888	0.63	4.0E-65	11429127	NT	Homo sapiens nel (chicken)-like 2 (NELL2), mRNA
10480	23126		2.04	4.0E-65	AJ277546.2	NT	Homo sapiens Janus kinase 2 (a protein tyrosine kinase) (JAK2), mRNA
10480	23126		2.04	4.0E-65	AJ277546.2	NT	Homo sapiens WEE1 gene for protein kinase and partial ZNF143 gene for zinc finger transcription factor

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10874	23554	36801	1.97	4.0E-05	AV738794.1	EST_HUMAN	AV738764 CB Homo sapiens cDNA clone CBCCBE05 5'
11041	23712	36982	3.68	4.0E-05	AF119846.1	NT	Homo sapiens PRO1474 mRNA, complete cds
12319	13814	28475	1.46	4.0E-05	4826735	NT	Homo sapiens fragile X mental retardation, autosomal homolog 1 (FXR1), mRNA
1210	15522		3.8	3.0E-05	X78032.1	NT	H. sapiens HZF9 mRNA for zinc finger protein
1551	14287	20884	0.91	3.0E-05	4504628	NT	Homo sapiens immunoglobulin superfamily, member 3 (IGSF3) mRNA, and translated products
1816	14558	27271	0.93	3.0E-05	A1000692.1	EST_HUMAN	α23f03.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1638173 3' similar to contains element
3271	16032	28683	0.75	3.0E-05	4504650	NT	MSR1 repetitive element ;
3709	16462	29101	0.99	3.0E-05	A1000692.1	EST_HUMAN	Homo sapiens lehrin, beta 1 (LAMB1), mRNA
4602	17337	29866	1.91	3.0E-05	6912385	NT	α23f03.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1638173 3' similar to contains element
9689	22817	35820	1.44	3.0E-05	BE787398.1	EST_HUMAN	Homo sapiens rab8 GTPase activating protein (GAP and centrosome-associated) (GAPCENA), mRNA
11363	23174	39402	11.12	3.0E-05	AA430008.1	EST_HUMAN	601479689F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3982405 5'
3399	16157	28809	5.75	2.0E-05	BF680294.1	EST_HUMAN	zw65a06.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:781042 5'
6442	19210		2.46	2.0E-05	BE263373.1	EST_HUMAN	602165062F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4285608 5'
7032	19724	32780	32.07	2.0E-05	BF576922.1	EST_HUMAN	601190883F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3634741 5'
8744	21436	34582	1.09	2.0E-05	AK024463.1	NT	602134359F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4289285 5'
8744	21436	34583	1.06	2.0E-05	AK024463.1	NT	Homo sapiens mRNA for FLJ00056 protein, partial cds
10552	23248	36485	2	2.0E-05	11419247	NT	Homo sapiens SWISNF related, matrix associated, actin dependent regulator of chromatin, subfamily d, member 3 (SMARCD3), mRNA
11989	24515		3.65	2.0E-05	AA307904.1	EST_HUMAN	EST178755 Odon oarctoma (HOC) cell line Homo sapiens cDNA 5' end similar to similar to endogenous retrovirus
12431	25158		2.2	2.0E-05	BF249086.1	EST_HUMAN	601854033F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4073768 5'
89	12915		1.59	1.0E-05	BF125544.1	EST_HUMAN	601763488F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:4026501 5'
528	13310	25943	1.44	1.0E-05	7657495	NT	Homo sapiens putative Rab5 GDP/GTP exchange factor homologue (RABEX5), mRNA
2033	14708	27498	1.29	1.0E-05	AB040946.1	NT	Homo sapiens mRNA for KIAA1513 protein, partial cds
3365	16124	28781	0.81	1.0E-05	BE466881.1	EST_HUMAN	h224a09.x1 NCI_CGAP_G08 Homo sapiens cDNA clone IMAGE:3208888 3'
3980	16728	28362	2.47	1.0E-05	4504082	NT	Homo sapiens glycocalyx 4 (GPC4) mRNA
3980	16728	28363	2.47	1.0E-05	4504082	NT	Homo sapiens glycocalyx 4 (GPC4) mRNA
4183	16923	29551	2.01	1.0E-05	AW028340.1	EST_HUMAN	w009c09.x1 NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2543152 3'
4183	16923	29552	2.01	1.0E-05	AW028340.1	EST_HUMAN	w009c09.x1 NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2543152 3'
8152	20846	33877	2.04	1.0E-05	AW820481.1	EST_HUMAN	QV2-ST0298-140200-042-f12 ST0298 Homo sapiens cDNA
8152	20846	33878	2.04	1.0E-05	AW820481.1	EST_HUMAN	QV2-ST0298-140200-042-f12 ST0298 Homo sapiens cDNA

**Table 4**  
**Single Exon Probes Expressed in Brain**

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Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4332	17071	28700	1.15	8.0E-06	AI924653.1	EST_HUMAN	wn57h07.x1 NCI_CGAP_Lut19 Homo sapiens cDNA clone IMAGE:2449597 3' similar to WP:F15G9.4A
8333	21028		0.48	8.0E-06	BE178563.1	EST_HUMAN	CE18595:
11108	23778	37062	3.14	6.0E-06	X08181.1	NT	PM2-HT0604-030300-001-508 HT0604 Homo sapiens cDNA
1346	14084	26769	1.45	5.0E-06	BE064410.1	EST_HUMAN	H.sapiens mRNA for ribosomal protein L31
5046	17765	30382	0.74	5.0E-06	BE888844.1	EST_HUMAN	RC4-BT0311-141199-011-408 BT0311 Homo sapiens cDNA
6048	17765	30383	0.74	5.0E-06	BE888844.1	EST_HUMAN	801681682F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3851791 5'
9184	21864	35028	16.11	5.0E-06		NT	601681562F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3851791 5'
773	13545	26206	0.98	4.0E-06		NT	Homo sapiens thyroid hormone receptor binding protein (AIB3), mRNA
1729	14471	27170	1.14	4.0E-06	AW897708.1	EST_HUMAN	Homo sapiens fragile X mental retardation syndrome 1 homolog (Fmr1), mRNA
2278	15004	27744	1.83	4.0E-06	X89211.1	NT	Mus musculus fragile X mental retardation syndrome 1 homolog (Fmr1), mRNA
2477	15185		3.02	4.0E-06	AJ223384.1	NT	RC1-NN0063-100500-022-402 NN0063 Homo sapiens cDNA
4733	17465		10.88	4.0E-06	9635487	NT	H.sapiens DNA for endogenous retroviral like element
5463	18262	31153	3.73	4.0E-06	11428643	NT	Homo sapiens germ-line DNA upstream of Jkappa locus
5657	18452	31366	1.15	4.0E-06	AW939119.1	EST_HUMAN	Human endogenous retrovirus, complete genome
6757	17928	30581	4.83	4.0E-06	AW965473.1	EST_HUMAN	Homo sapiens methylene tetrahydrofolate dehydrogenase (NAD+ dependent), methenyltetrahydrofolate cyclohydrolase (MTHFD2), mRNA
7031	19723	32778	7.93	4.0E-06	U78168.1	NT	QV1-DT0069-110200-087-g10 DT0069 Homo sapiens cDNA
7529	18282	31153	0.72	4.0E-06		NT	EST377548 MAGE resequences, MAGI Homo sapiens cDNA
7976	20671	33784	5.63	4.0E-06	11421638	NT	Homo sapiens cAMP-regulated guanine nucleotide exchange factor 1 (cAMP-GEF1) mRNA, complete cds
8034	20729	33862	0.73	4.0E-06	X57147.1	NT	Homo sapiens methylene tetrahydrofolate dehydrogenase (NAD+ dependent), methenyltetrahydrofolate cyclohydrolase (MTHFD2), mRNA
10556	23282	36489	1.97	4.0E-06	BF507493.1	EST_HUMAN	Homo sapiens hypothetical protein FLJ20119 (FLJ20116), mRNA
11351	24041	37344	1.28	4.0E-06	AB023215.1	NT	Human endogenous retrovirus pHE-1 (ERV9)
1407	14154	28835	10.96	3.0E-06		NT	UI-H-BW1-errir-e-10-Q-U1.s1 NCI_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3070747 3'
1407	14154	20630	10.96	3.0E-06		NT	Homo sapiens mRNA for KIAA0988 protein, partial cds
1975	14711	27429	1.16	3.0E-06	N55323.1	EST_HUMAN	Homo sapiens solute carrier family 25 (mitochondrial carrier; adenine nucleotide translocator), member 5 (SLC25A5), nuclear gene encoding mitochondrial protein, mRNA
1975	14711	27430	1.16	3.0E-06	N55323.1	EST_HUMAN	Homo sapiens solute carrier family 25 (mitochondrial carrier; adenine nucleotide translocator), member 5 (SLC25A5), nuclear gene encoding mitochondrial protein, mRNA

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1975	14711	27431	1.16	3.0E-06	N55323.1	EST_HUMAN	yz27g12.1 Soares_multiple_sclerosis_2NblHASP Homo sapiens cDNA clone IMAGE:284326 5' similar to SW:H2B1_TIGCA P35068 HISTONE H2B.1/H2B.2. [2] PIR:B68612;
2711	15418	28158	3.54	3.0E-06	11141880	NT	Homo sapiens TGF(beta)-induced transcription factor 2 (TGIF2), mRNA
3115	15880	28520	0.3	3.0E-06	7662223	NT	Homo sapiens KIAA0649 gene product (KIAA0649), mRNA
5380	18180	30870	1.14	3.0E-06	AB020698.1	NT	Homo sapiens mRNA for KIAA0692 protein, partial cds
5490	18289	31188	0.73	3.0E-06	M13976.1	NT	Homo sapiens protein kinase C beta-II type (PRKCB1) mRNA, complete cds
5886	18479	31397	1.92	3.0E-06	11417946	NT	Homo sapiens NIPSNAP, C. elegans, homolog 1 (NIPSNAP1), mRNA
5886	18479	31398	1.92	3.0E-06	11417946	NT	Homo sapiens NIPSNAP, C. elegans, homolog 1 (NIPSNAP1), mRNA
9425	22103	35275	0.62	3.0E-06	AK024453.1	NT	Homo sapiens mRNA for FLJ00045 protein, partial cds
9610	22272	35459	0.52	3.0E-06	11417116	NT	Homo sapiens KIAA0433 protein (KIAA0433), mRNA
9873	22821	35826	0.8	3.0E-06	7019480	NT	Homo sapiens protocadherin beta 1 (PCDH-beta1), mRNA
10420	23066	36287	0.97	3.0E-06	AF155659.1	NT	Homo sapiens molybdenum cofactor biosynthesis protein E (MCBPE) mRNA, complete cds
11494	24095	37406	6.16	3.0E-06	5453949	NT	Homo sapiens protein phosphatase 2, regulatory subunit B (B59), alpha isoform (PPP2R5A) mRNA
11806	24306	37730	1.67	3.0E-06	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
50	12879	25505	2.15	2.0E-06	7657334	NT	Homo sapiens Misshepen/NIK-related kinase (MINK), mRNA
50	12879	25506	2.15	2.0E-06	7657334	NT	Homo sapiens Misshepen/NIK-related kinase (MINK), mRNA
413	12824	25437	1.76	2.0E-06	4505524	NT	Homo sapiens origin recognition complex, subunit 5 (yeast homolog)-like (ORC5L) mRNA, and translated products
413	12824	25438	1.76	2.0E-06	4505524	NT	Homo sapiens origin recognition complex, subunit 5 (yeast homolog)-like (ORC5L) mRNA, and translated products
1819	14558	27272	2.05	2.0E-06	AL163301.2	NT	Homo sapiens chromosome 21 segment HS21C101
3510	16266	28920	0.77	2.0E-06	8923290	NT	Homo sapiens hypothetical protein FLJ20309 (FLJ20309), mRNA
3747	16500	29134	0.88	2.0E-06	AL117233.1	NT	Novel human gene mapping to chromosome 1
4044	16789	29417	0.8	2.0E-06	AF108389.1	NT	Homo sapiens sodium/calcium exchanger isoform NaCa3 (NCX1) mRNA, complete cds
4607	17342	29973	9.48	2.0E-06	AF133267.2	NT	Homo sapiens HLA-B gene for human leukocyte antigen B
4607	17342	29974	9.48	2.0E-06	AF133267.2	NT	Homo sapiens HLA-B gene for human leukocyte antigen B
5726	18518	31439	1.3	2.0E-06	AW969854.1	EST_HUMAN	EST380830 IMAGE sequences, MAGJ Homo sapiens cDNA
5726	18518	31440	1.3	2.0E-06	AW969854.1	EST_HUMAN	EST380830 IMAGE sequences, MAGJ Homo sapiens cDNA
6746	21438	34585	2.26	2.0E-06	N45480.1	EST_HUMAN	y56a02.1 Soares_multiple_sclerosis_2NblHASP Homo sapiens cDNA clone IMAGE:277826 5'
12329	29370		2.37	2.0E-06	11418318	NT	Homo sapiens G-2 and S-phase expressed 1 (GTSE1), mRNA
1678	14422		1.15	1.0E-06	BE867173.1	EST_HUMAN	601508376F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:390963 1 5'
2895	15662	28306	1.36	1.0E-06	AV717817.1	EST_HUMAN	AV717817 DC8 Homo sapiens cDNA clone DC8AD007 5'

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Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2895	15682	28310	1.36	1.0E-68	AV717817.1	EST_HUMAN	AV717817 DCB Homo sapiens cDNA clone DCBADC07 5'
4352	15682	28309	3.81	1.0E-68	AV717817.1	EST_HUMAN	AV717817 DCB Homo sapiens cDNA clone DCBADC07 5'
4362	15682	28310	3.81	1.0E-68	AV717817.1	EST_HUMAN	AV717817 DCB Homo sapiens cDNA clone DCBADC07 5'
5297	18102	30761	5.96	1.0E-68	BF673088.1	EST_HUMAN	602152908F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4294151 5'
5692	18486	31408	0.77	1.0E-68	BE765232.1	EST_HUMAN	IL2-NT0101-280700-116-E04 NT0101 Homo sapiens cDNA
5692	18486	31407	0.77	1.0E-68	BE765232.1	EST_HUMAN	IL2-NT0101-280700-116-E04 NT0101 Homo sapiens cDNA
6839	19501	32526	1.57	1.0E-68	BF328623.1	EST_HUMAN	RCS-BN0183-01000-034-G08 BN0183 Homo sapiens cDNA
8357	21050	34189	1.19	1.0E-68	AA868858.1	EST_HUMAN	es80e04.a1 NCJ_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:827262 3'
9328	21063	35164	0.84	1.0E-68	AA018828.1	EST_HUMAN	z857e12.r1 Soares retina N2b-4R Homo sapiens cDNA clone IMAGE:363118 5'
10270	22918	36129	0.92	1.0E-68	AV748749.1	EST_HUMAN	AV748749 NPC Homo sapiens cDNA clone NPCBVA05 5'
10270	22918	36130	0.92	1.0E-68	AV748749.1	EST_HUMAN	AV748749 NPC Homo sapiens cDNA clone NPCBVA05 5'
10882	23542	36789	2.48	1.0E-68	AF111167.2	NT	Homo sapiens jun dimerization protein gene, partial cds; cfos gene, complete cds; and unknown gene
11509	24109	37422	1.8	1.0E-68	AW968744.1	EST_HUMAN	EST380820 MAGE resequences, MAGJ Homo sapiens cDNA
12113	24608		2.51	9.0E-67	11418177	NT	Homo sapiens Ran GTPase activating protein 1 (RANGAP1), mRNA
371	13196	25841	1.52	7.0E-67	AW162232.1	EST_HUMAN	eu75d02.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2782083 3' similar to gb:M37104
1361	14109	26784	2.89	7.0E-67	AA383418.1	EST_HUMAN	ATP SYNTHASE COUPLING FACTOR 6, MITOCHONDRIAL PRECURSOR (HUMAN);
1547	14293	26979	1.38	7.0E-67	W85947.1	EST_HUMAN	EST98812 Testis 1 Homo sapiens cDNA 5' end similar to similar to C. elegans hypothetical protein, cosmid ZK333
1547	14293	26980	1.38	7.0E-67	W85947.1	EST_HUMAN	zh56b05.r1 Soares fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:416049 5'
2028	14781	27489	2.06	7.0E-67	7657243	NT	zh56b05.r1 Soares fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:416049 5'
2028	14781	27490	2.06	7.0E-67	7657243	NT	Homo sapiens inositol 1,3,4-triphosphate 5/6 kinase (ITPK1), mRNA
2813	13198	25841	3.4	7.0E-67	AW162232.1	EST_HUMAN	Homo sapiens inositol 1,3,4-triphosphate 5/6 kinase (ITPK1), mRNA
5989	18770	31733	0.78	7.0E-67	10190695	NT	eu75d02.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2782083 3' similar to gb:M37104
6177	18954	31927	2.02	7.0E-67	11425572	NT	ATP SYNTHASE COUPLING FACTOR 6, MITOCHONDRIAL PRECURSOR (HUMAN);
6177	18954	31928	2.02	7.0E-67	11425572	NT	Homo sapiens zinc finger protein 304 (ZNF304), mRNA
6623	18985	32398	1.29	7.0E-67	4885084	NT	Homo sapiens adaptor-related protein complex 2, beta 1 subunit (AP2B1), mRNA
7531	20201	33296	1	7.0E-67	11419212	NT	Homo sapiens adaptor-related protein complex 2, beta 1 subunit (AP2B1), mRNA
7531	20201	33297	1	7.0E-67	11419212	NT	Homo sapiens ATPase, H+ transporting, lysosomal (vacuolar proton pump) non-catalytic accessory protein 1A (110/116KD) (ATP6N1A), mRNA
8222	20916	34052	0.59	7.0E-67	4557732	NT	Homo sapiens mitochondrial carrier family protein (LOC55972), mRNA
8830	21522	34690	0.58	7.0E-67	10855044	NT	Homo sapiens mitochondrial carrier family protein (LOC55972), mRNA
							Homo sapiens latent transforming growth factor beta binding protein 2 (LTBP2) mRNA
							Homo sapiens retinaldehyde dehydrogenase 2 (RALDH2), mRNA



Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11266	23918		1.56	7.0E-67	11434579	NT	Homo sapiens fucosyltransferase 8 (alpha (1,6) fucosyltransferase) (FUT8), mRNA
11677	24272	37594	6.37	7.0E-67	U82488.1	NT	Human cytochrome oxidase subunit Via (COX6A1P) pseudogene, complete cds
11898	24466	37803	2.24	7.0E-67	11430480	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
11898	24466	37804	2.24	7.0E-67	11430480	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
12355	24769	31091	1.58	7.0E-67	AB011399.1	NT	Homo sapiens gene for AF-9, complete cds
546	13329	28680	2.12	6.0E-67	X68988.1	NT	H. sapiens mRNA for acetyl-CoA carboxylase
778	13550	28211	0.92	6.0E-67	Z17227.1	NT	Homo sapiens mRNA for transmembrane receptor protein
1250	13698	28698	1.28	6.0E-67	Y14320.1	NT	Homo sapiens PMP70 gene, exons 3, 4, 5, 6 & 7
3166	15829	28678	1.17	6.0E-67	4508434	NT	Homo sapiens retinoblastoma 1 (including osteosarcoma) (RB1) mRNA
3431	16187	28835	1.64	6.0E-67	4507332	NT	Homo sapiens Synapsin III (SYN3) mRNA, and translated products
3431	16187	28836	1.64	6.0E-67	4507332	NT	Homo sapiens Synapsin III (SYN3) mRNA, and translated products
4108	16849	29474	0.7	6.0E-67	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
4108	16849	29475	0.7	6.0E-67	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
4657	17391	30026	5.01	6.0E-67	7657020	NT	Homo sapiens DKFZp434P211 protein (DKFZP434P211), mRNA
4657	17391	30026	5.01	6.0E-67	7657020	NT	Homo sapiens DKFZp434P211 protein (DKFZP434P211), mRNA
5101	17635	28629	1.23	6.0E-67	4507848	NT	Homo sapiens DKFZp434P211 protein (DKFZP434P211), mRNA
3215	15978	28629	1.91	5.0E-67	AF008900.1	NT	Homo sapiens ubiquitin specific protease 13 (isopeptidase T-3) (USP13) mRNA
10905	23585		1.68	5.0E-67	BE010038.1	EST_HUMAN	Homo sapiens T cell receptor beta locus, TCRBV7S3A2 to TCRBV12S2 region
1305	14054	26728	0.93	4.0E-67	R00810.1	EST_HUMAN	Homo sapiens T cell receptor beta locus, TCRBV7S3A2 to TCRBV12S2 region
7820	20615	33743	0.82	4.0E-67	AI733032.1	EST_HUMAN	PM3-BN0178-100400-001-g04 BN0178 Homo sapiens cDNA
8281	20975		1.24	4.0E-67	BF357321.1	EST_HUMAN	Yn02d11.1 Scores adult brain N2b-41B55Y Homo sapiens cDNA clone IMAGE:167253 5'
10998	23969		1.39	4.0E-67	AA714294.1	EST_HUMAN	Q06730 ZINC FINGER PROTEIN 33A
2816	13398	28031	1.55	3.0E-67	AA333788.1	EST_HUMAN	RC04-BT0834-150900-026-c03 HT0834 Homo sapiens cDNA
3446	16202	28852	0.98	3.0E-67	BE084410.1	EST_HUMAN	PRO-POL-DUTPASE POLYPROTEIN ;
4648	17380	30012	2.87	3.0E-67	AW869159.1	EST_HUMAN	EST37903 Embryo, 9 week Homo sapiens cDNA 5' and
8081	20775	33905	1.53	3.0E-67	BF196098.1	EST_HUMAN	RC4-BT0311-141199-011-h08 BT0311 Homo sapiens cDNA
11224	23887		14.39	3.0E-67	AA927874.1	EST_HUMAN	MR3-SN0088-040500-008-f01 SN0088 Homo sapiens cDNA
183	12986	25635	0.81	2.0E-67	BE348354.1	EST_HUMAN	ht8105.x1 NCI_CGAP_Kd11 Homo sapiens cDNA clone IMAGE:3134913 3' similar to SW:RHOP_MOUSE
825	13585	26285	7.3	2.0E-67	AW816405.1	EST_HUMAN	Q61085 GTP-RHO BINDING PROTEIN 1 ;
1083	13841		1.75	2.0E-67	AF167400.1	NT	am18b07.x1 Scores_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1541365 3'
							CE08817 ;
							QV4-ST0234-181189-037-406 ST0234 Homo sapiens cDNA
							Homo sapiens double stranded RNA activated protein kinase (PKR) gene, exons 2a, 2, 3, and 4

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1877	14614	27325	1.36	2.0E-67	BE303037.1	EST_HUMAN	ba72p05.y1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:2905976 5' similar to TR:094892 094892 KIAA0708 PROTEIN.;
1877	14614	27326	1.38	2.0E-67	BE303037.1	EST_HUMAN	ba72p05.y1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:2905976 5' similar to TR:094892 094892 KIAA0708 PROTEIN.;
2235	14963	27702	1.3	2.0E-67	11422946	NT	Homo sapiens hypothetical protein dJ462023.2 (D.J462023.2), mRNA
2235	14963	27703	1.3	2.0E-67	11422946	NT	Homo sapiens hypothetical protein dJ462023.2 (D.J462023.2), mRNA
2394	15105	27845	1.09	2.0E-67	AF309591.1	NT	Homo sapiens KRAAB zinc finger protein ZFQR mRNA, complete cds
2432	15153	27887	1.28	2.0E-67	4758786	NT	Homo sapiens developmentally regulated GTP-binding protein 1 (DRG1), mRNA
3480	18216	28870	3.8	2.0E-67	AA625755.1	EST_HUMAN	zu81g01.a1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:745392 3'
3984	16732	28396	3.03	2.0E-67	AL163300.2	NT	Homo sapiens chromosome 21 segment HS21C100
5981	18782	31728	0.6	2.0E-67	AL049784.1	NT	Novel human gene mapping to chromosome 13
6034	18814	31774	5.54	2.0E-67	BF240758.1	EST_HUMAN	601875351F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:4091893 5'
6203	18978	31956	2.46	2.0E-67	AB051763.1	NT	Homo sapiens mRNA for NADPH-cytochrome P-450 reductase, complete cds
6203	18978	31957	2.46	2.0E-67	AB051763.1	NT	Homo sapiens mRNA for NADPH-cytochrome P-450 reductase, complete cds
6545	19310	32315	0.76	2.0E-67	AL120542.1	EST_HUMAN	DKFZp761A229_j1 761 (synonym: ham2) Homo sapiens cDNA clone DKFZp761A229 5'
8456	21148	34280	0.82	2.0E-67	AA334809.1	EST_HUMAN	EST338850 Embryo, 9 week Homo sapiens cDNA 5' and similar to similar to cerebellin
8456	21148	34291	0.82	2.0E-67	AA334809.1	EST_HUMAN	EST338850 Embryo, 9 week Homo sapiens cDNA 5' and similar to similar to cerebellin
8895	21596	34724	1.21	2.0E-67	AW602635.1	EST_HUMAN	RC4-BT0568-170100-011-c07 BT0568 Homo sapiens cDNA
8895	21596	34725	1.21	2.0E-67	AW602635.1	EST_HUMAN	RC4-BT0568-170100-011-c07 BT0568 Homo sapiens cDNA
9496	22076	35248	0.83	2.0E-67	AV731333	EST_HUMAN	AV731333 HTF Homo sapiens cDNA clone HTFARD03 5'
9608	22261	35447	0.97	2.0E-67	AV731333	EST_HUMAN	UJH-B12-shm-e-10-0-ULe1 NCJ CGAP Sub4 Homo sapiens cDNA clone IMAGE:2727283 3'
10970	23646	36989	3.72	2.0E-67	BF034485.1	EST_HUMAN	601455282F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3858975 5'
10988	25433		4.67	2.0E-67	11438448	NT	Homo sapiens KIAA0985 protein (KIAA0985), mRNA
11163	23868	37145	2.11	2.0E-67	BE285714.1	EST_HUMAN	601175762F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3531038 5'
11434	23201	36433	1.86	2.0E-67	BF377169.1	EST_HUMAN	PM2-TN0103-040900-001-c02 TN0103 Homo sapiens cDNA
12335	25231	30819	1.36	2.0E-67	11418189	NT	Homo sapiens thyroid autoantigen 70kD (Ku antigen) (G22P-1), mRNA
12527	24874	31018	2.05	2.0E-67	11417877	NT	Homo sapiens gamma-glutamyltransferase 1 (GGT1), mRNA
246	13055	25695	9.34	1.0E-67	4502166	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
682	13467	26114	1.01	1.0E-67	AA702794.1	EST_HUMAN	zif0104.1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:448015 3'
11845	24429	37770	8.58	1.0E-67	AB054867.1	EST_HUMAN	wb95c12.x1 NCJ CGAP GC8 Homo sapiens cDNA clone IMAGE:2310550 3'
2174	14903	27636	2.13	8.0E-68	BE870732.1	EST_HUMAN	601448558F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3952254 5'
3851	16801	29238	4.96	8.0E-68	AA209456.1	EST_HUMAN	zif82h10.1 Strabagene INT neuron (8937233) Homo sapiens cDNA clone IMAGE:648163 5' similar to SW:SAV_SULAC Q07590 SAV PROTEIN.;

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF-SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3651	16001	28239	4.96	8.0E-08	AA209456.1	EST_HUMAN	z082h10.11 Striatum hNT neuron (#937233) Homo sapiens cDNA clone IMAGE:648163 5' similar to SW:SAV_SULAC_Q07590 SAV PROTEIN. ;
8000	20696	33822	0.55	7.0E-08	A1810505.1	EST_HUMAN	W89603.x1 NCI_QGAP_P128 Homo sapiens cDNA clone IMAGE:2312860 3'
7737	20402	33618	0.56	6.0E-08	AB014520.1	NT	Homo sapiens mRNA for KIAA0020 protein, partial cds
10347	22894	36213	2.47	6.0E-08	11422088	NT	Homo sapiens brain A-inhibited guanine nucleotide-exchange protein 2 (BIG2), mRNA
11067	23767	37042	1.61	6.0E-08	AF133901.1	NT	Homo sapiens killer inhibitory receptor 2-2-1 (KIR221) and killer inhibitory receptor 2-2-2 (KIR222) genes, partial cds
12529	24875		1.78	6.0E-08	BE612554.1	EST_HUMAN	601452067F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3855761 5'
12772	25026	30963	1.4	6.0E-08	BF310975.1	EST_HUMAN	601894635F2 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4124144 5'
800	13572	26233	5.05	5.0E-08	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
800	13572	26234	5.05	5.0E-08	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
2783	15488	28228	1.36	5.0E-08	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
3144	15908	28553	3.23	5.0E-08	AB037852.1	NT	Homo sapiens mRNA for KIAA1431 protein, partial cds
4457	17193	29819	0.73	5.0E-08	AL157645.1	EST_HUMAN	DKFZ547D207.1_1 547 (synonym: hbr1) Homo sapiens cDNA clone DKFZp547D207 5'
6627	19399	32402	0.61	5.0E-08	7019612	NT	Homo sapiens RAB3A interacting protein (rabn3)-like 1 (RAB3IL1), mRNA
6627	19399	32403	0.61	5.0E-08	7019612	NT	Homo sapiens RAB3A interacting protein (rabn3)-like 1 (RAB3IL1), mRNA
4918	17846		9.55	4.0E-08	P04408	SWISSPROT	GLYCERALDEHYDE 3-PHOSPHATE DEHYDROGENASE, LIVER
5098	17817	30434	0.87	4.0E-08	7548804	NT	Homo sapiens deiodinase, iodothyronine, type II (DIO2), transcript variant 2, mRNA
5674	18631	31802	0.7	4.0E-08	AF157063.1	NT	Homo sapiens sedlin (SEDL) gene, exon 4
6675	19692	32629	6.51	4.0E-08	11055891	NT	Homo sapiens serine carboxypeptidase 1 precursor protein (HSCP1), mRNA
6675	19692	32630	6.51	4.0E-08	11055891	NT	Homo sapiens serine carboxypeptidase 1 precursor protein (HSCP1), mRNA
7582	20250	33356	0.66	4.0E-08	7681683	NT	Homo sapiens DKFZP588L0724 protein (DKFZP588L0724), mRNA
8638	21829	34771	5.05	4.0E-08	D63479.2	NT	Homo sapiens mRNA for KIAA0145 protein, partial cds
8638	21829	34772	5.05	4.0E-08	D63479.2	NT	Homo sapiens mRNA for KIAA0145 protein, partial cds
9077	21766	34929	3.08	4.0E-08	AB040918.1	NT	Homo sapiens mRNA for KIAA1485 protein, partial cds
10925	23605	36854	1.68	4.0E-08	4506282	NT	Homo sapiens protein tyrosine phosphatase type IVA, member 1 (PTP4A1) mRNA
10925	23605	36855	1.68	4.0E-08	4506282	NT	Homo sapiens protein tyrosine phosphatase type IVA, member 1 (PTP4A1) mRNA
11115	23785	37061	1.26	4.0E-08	AB040948.1	NT	Homo sapiens mRNA for KIAA1515 protein, partial cds
11828	24412	37749	1.39	4.0E-08	AJ251760.1	NT	Homo sapiens NESP55, GNAS1 antisense (partial) and XLaiphas (partial) genes
11864	24448	37789	12.15	4.0E-08	4758267	NT	Homo sapiens echinoderm microtubule-associated protein-like (EMAPL), mRNA
11864	24448	37790	12.15	4.0E-08	4758267	NT	Homo sapiens echinoderm microtubule-associated protein-like (EMAPL), mRNA
3653	18408	29045	5.37	3.0E-08	AF236082.1	NT	Mus musculus G-protein coupled receptor GPR73 (Gpr73) mRNA, complete cds
9357	20428		5.82	3.0E-08	A1342323.1	EST_HUMAN	q38h02.x1 Scores_fetal_lung_NHIL19W Homo sapiens cDNA clone IMAGE:1950291 3' similar to contains THR12 THR repetitive element;

Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10398	23045	36261	1.23	3.0E-68	F28784.1	EST_HUMAN	HSPD18178 HMB3 Homo sapiens cDNA clone s3000023D09
2865	17883		15.31	2.0E-68	D00522.1	NT	Cricetulus longicaudatus mRNA for EF-1 alpha, complete cds
4633	17368	30004	1.38	2.0E-68	AB008881.1	NT	Homo sapiens gene for activin receptor type IIB, complete cds
6776	18520		9.84	2.0E-68	R46088.1	EST_HUMAN	y38p04.s1 Soares Infant brain T1B1B Homo sapiens cDNA clone IMAGE:34898 3'
6963	19445	32462	5.38	2.0E-68	BF035316.1	EST_HUMAN	601458514F1 NIH_MGC_60 Homo sapiens cDNA clone IMAGE:34898 3'
7270	19854	33030	0.73	2.0E-68	BF336745.1	EST_HUMAN	IL3-CT0534-180900-273-A01 CT0534 Homo sapiens cDNA
8848	21539	34685	0.63	2.0E-68	Q05859	SWISSPROT	FORMIN 4 (LIMB DEFORMITY PROTEIN)
10505	23151	36376	0.75	2.0E-68	N78485.1	EST_HUMAN	y278d07.1 Soares multiple sclerosis 2NbhMSP Homo sapiens cDNA clone IMAGE:289165 5'
11210	23873	37180	1.66	2.0E-68	BF330594.1	EST_HUMAN	QVO-BT0074-130699-014-g04 BT0074 Homo sapiens cDNA
77	12903	26541	1	1.0E-68	4506222	NT	Homo sapiens meningioma (disrupted in balanced translocation) 1 (MN1), mRNA
268	13095	25737	13	1.0E-68	AW816405.1	EST_HUMAN	QVA-ST0234-181189-037-05 ST0234 Homo sapiens cDNA
2248	14977	27715	1.03	1.0E-68	AB011149.1	NT	Homo sapiens mRNA for KIAA0577 protein, complete cds
2249	14977	27716	1.03	1.0E-68	AB011149.1	NT	Homo sapiens mRNA for KIAA0577 protein, complete cds
3981	16739	28373	0.95	1.0E-68	BE290032.1	EST_HUMAN	601177002F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3532344 5'
4969	17694	30302	0.92	1.0E-68	AA897343.1	EST_HUMAN	ala7g12.s1 Soares NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1480518 3'
5239	18045	30874	1.37	1.0E-68	7862349	NT	Homo sapiens cell recognition molecule Caspr2 (KIAA0868), mRNA
7578	20245	33350	1	1.0E-68	11436716	NT	Homo sapiens centrin/SUMO-specific protease (SENPA1), mRNA
10373	23019	36235	0.6	1.0E-68	AA428538.1	EST_HUMAN	zw74d02.1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:781923 5'
10758	23441	36885	1.85	1.0E-68	11418869	NT	Homo sapiens phosphodiesterase 7B (PDE7B), mRNA
10768	23441	36886	1.85	1.0E-68	11418869	NT	Homo sapiens phosphodiesterase 7B (PDE7B), mRNA
10819	23502	36741	3.5	1.0E-68	L76416.1	NT	Homo sapiens MIF2 suppressor (HSMIT3) mRNA, complete cds
11148	23815	37098	1.71	1.0E-68	11433277	NT	Homo sapiens myosin IC (MYO1C), mRNA
11228	23889	37178	1.62	1.0E-68	AF043129.1	NT	Homo sapiens interleukin-7 receptor precursor (IL7R) gene, exons 7 and 8 and complete cds
11270	23931	37223	1.26	1.0E-68	U50319.1	NT	Human protein kinase C substrate 80K-H (PRKCSH) gene, exon 4-5
11270	23931	37224	1.26	1.0E-68	U50319.1	NT	Human protein kinase C substrate 80K-H (PRKCSH) gene, exon 4-5
11688	24261	37584	1.48	1.0E-68	11418431	NT	Homo sapiens CGI-76 protein (LOC51632), mRNA
11688	24261	37585	1.48	1.0E-68	11418431	NT	Homo sapiens CGI-76 protein (LOC51632), mRNA
12511	12903	25541	2.66	1.0E-68	4505222	NT	Homo sapiens meningioma (disrupted in balanced translocation) 1 (MN1), mRNA
12719	25322	30712	2.11	1.0E-68	11430460	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
19	12847	25460	1.16	9.0E-69	5031978	NT	Homo sapiens pre-B-cell colony-enhancing factor (PBEF) mRNA
18	12847	25461	1.16	9.0E-69	5031978	NT	Homo sapiens pre-B-cell colony-enhancing factor (PBEF) mRNA
1006	13766	28426	1.41	9.0E-69	5031980	NT	Homo sapiens 26S proteasome-associated pad1 homolog (POH1) mRNA
1008	13766	28427	1.41	9.0E-69	5031980	NT	Homo sapiens 26S proteasome-associated pad1 homolog (POH1) mRNA
2275	15001	27740	1.15	9.0E-69	4758279	NT	Homo sapiens EphA4 (EPHA4) mRNA

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2276	16001	27741	1.15	9.0E-09	4758279	NT	Homo sapiens EphA4 (EPHA4) mRNA
4109	18852	29479	0.71	9.0E-08	4757867	NT	Homo sapiens v-rat murine sarcoma viral oncogene homolog B1 (BRAF) mRNA
10805	23488		6.5	9.0E-09	AU117241.1	EST_HUMAN	AU117241 HEMBA1 Homo sapiens cDNA clone HEMBA100968 5'
3381	16140		1.09	8.0E-09	AJ237744.1	NT	Homo sapiens RIBIIR gene (partial), exon 12
6259	19033	32008	6.49	7.0E-09	9989912	NT	Homo sapiens actin-related protein 3-beta (ARP3BETA), mRNA
7762	20458	33581	9.09	6.0E-09	AI192784.1	EST_HUMAN	q62h01.x1 Soares_fetal_lung_NHL19W Homo sapiens cDNA clone IMAGE:1743801 3' similar to gb:L11566 60S RIBOSOMAL PROTEIN L18 (HUMAN);
7762	20458	33582	9.09	6.0E-09	AI192784.1	EST_HUMAN	q62h01.x1 Soares_fetal_lung_NHL19W Homo sapiens cDNA clone IMAGE:1743801 3' similar to
8873	21584	34709	1.01	5.0E-09	AA926039.1	EST_HUMAN	gb:L11566 60S RIBOSOMAL PROTEIN L18 (HUMAN);
507	13291		1.76	4.0E-09	AI873630.1	EST_HUMAN	cd06a03.31 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1372300 3'
5674	25073	31394	1.42	4.0E-09	BE561063.1	EST_HUMAN	vm28h11.x1 NCL_CGAP_U14 Homo sapiens cDNA clone IMAGE:2437125 3'
5783	18545	31487	5.28	4.0E-09	AI704973.1	EST_HUMAN	AI1344705F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3077641 5'
6331	19297	32301	2.71	4.0E-09	4557732	NT	wh57b06.x1 NCL_CGAP_K411 Homo sapiens cDNA clone IMAGE:2384819 3' similar to TR:055137 O55137 ACYL-COA THIOESTERASE;
6331	19297	32302	2.71	4.0E-09	4557732	NT	Homo sapiens latent transforming growth factor beta binding protein 2 (LTBP2) mRNA
8812	21504	34651	0.52	4.0E-09	AU119034.1	EST_HUMAN	Homo sapiens latent transforming growth factor beta binding protein 2 (LTBP2) mRNA
377	13202	25848	3.69	3.0E-09	BE268012.1	EST_HUMAN	AU119634 HEMBA1 Homo sapiens cDNA clone HEMBA1006283 5'
598	13376	26006	2.32	3.0E-09	AF221712.1	NT	80111037F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3351352 5'
							Homo sapiens Smad- and Olf-interacting zinc finger protein mRNA, partial cds
1548	14294		3.19	3.0E-09	T80514.1	EST_HUMAN	yd08a02.r1 Soares Infant brain 1NIB Homo sapiens cDNA clone IMAGE:24880 5' similar to SP:A48838
5163	17894	37797	3.64	3.0E-09	11418185	NT	A48838 SPECIF III=EGF REPEAT-CONTAINING FIBROPELIN-LIKE PROTEIN - SEA URCHIN ; Homo sapiens acetylase 2, mitochondrial (ACO2), mRNA
6705	19020		0.67	3.0E-09	AJ277557.1	NT	Homo sapiens dNT-2 gene for mitochondrial 5'(3')-deoxyribonucleotidase (dNT-2 gene), exons 1-5
6759	17928	30563	0.74	3.0E-09	11428786	NT	Homo sapiens sperm surface protein (HSS), mRNA
7272	19669	33032	0.68	3.0E-09	AF095703.1	NT	Homo sapiens short chain L-3-hydroxyacyl-CoA dehydrogenase precursor (HADHSC) gene, nuclear gene encoding mitochondrial protein, complete cds
7320	20003	33082	1.83	3.0E-09	U52561.1	NT	Homo sapiens arm-repeat protein NFRAP/neurjungin (CTNND2) mRNA, partial cds
7451	20127	33219	8.32	3.0E-09	AF268075.1	NT	Homo sapiens TRAF6-binding protein TBBP mRNA, complete cds
8270	20984	34106	0.88	3.0E-09	AW138846.1	EST_HUMAN	UI-H-B11-acw-g-01-q-UJ.s1 NCL_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2716840 3'
8686	21358		0.65	3.0E-09	AA376399.1	EST_HUMAN	EST88907 HSC172 cells II Homo sapiens cDNA 5' and similar to ribosomal protein S18
9313	21980	35152	1.01	3.0E-09	X13223.1	NT	H. sapiens mRNA for N-acetylglucosamide-(beta 1-4)-galactosyltransferase

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9433	22111	35286	2.03	3.0E-09	X08233.1	NT	Human mRNA for calcium-binding protein in macrophages (MRP-14) macrophage migration inhibitory factor (MIF)-related protein
9729	22380	35982	0.75	3.0E-09	5730036	NT	Homo sapiens SEC10 (S. cerevisiae)-like 1 (SEC10L1), mRNA
10538	23235	38468	1.44	3.0E-09	11432120	NT	Homo sapiens ribosomal protein S16a (RPS16A), mRNA
10745	23432		7.81	3.0E-09	AA376399.1	EST_HUMAN	EST88807 HSC172 cells II Homo sapiens cDNA 5' and similar to similar to ribosomal protein S18
12024	24552		5.17	3.0E-09	11418157	NT	Homo sapiens H3C8.2 protein (H3C8.2), mRNA
126	13180	25827	1.84	2.0E-09	AF160252.1	NT	Homo sapiens KIAA0553 protein gene, complete cds; and alpha1b protein gene, partial cds
126	13180	25828	1.84	2.0E-09	AF160252.1	NT	Homo sapiens KIAA0553 protein gene, complete cds; and alpha1b protein gene, partial cds
395	13180	25827	10.33	2.0E-09	AF160252.1	NT	Homo sapiens KIAA0553 protein gene, complete cds; and alpha1b protein gene, partial cds
395	13180	25828	10.33	2.0E-09	AF160252.1	NT	Homo sapiens KIAA0553 protein gene, complete cds; and alpha1b protein gene, partial cds
1878	14615	27327	2.08	2.0E-09	BE267857.1	EST_HUMAN	601109444F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3350074 5'
2848	15616		3.16	2.0E-09	AA431157.1	EST_HUMAN	zw71g02.1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:781082 5'
8452	21144	34284	1.08	2.0E-09	AA114270.1	EST_HUMAN	zm29p01.1 Strategic pancreas (8937208) Homo sapiens cDNA clone IMAGE:527088 5'
1998	14441	27139	1.98	1.0E-09	AF053788.1	NT	Rattus norvegicus brain specific corticosterone-binding protein CBP80 mRNA, partial cds
4962	17687		0.74	1.0E-09	BE408094.1	EST_HUMAN	601301284F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3635781 5'
5959	18741	31700	0.87	1.0E-09	BE902501.1	EST_HUMAN	601675788F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3958532 5'
5959	18741	31701	0.87	1.0E-09	BE902501.1	EST_HUMAN	601675788F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3958532 5'
8508	19273	32274	4.37	1.0E-09	AW383969.1	EST_HUMAN	QV0-TT0010-031189-045-c07 TT0010 Homo sapiens cDNA
6721	19636	32879	1.26	1.0E-09	7682263	NT	Homo sapiens KIAA0716 gene product (KIAA0716), mRNA
6721	19636	32690	1.26	1.0E-09	7682263	NT	Homo sapiens KIAA0716 gene product (KIAA0716), mRNA
6737	19571	32803	3.01	1.0E-09	AB032973.1	NT	Homo sapiens mRNA for KIAA1147 protein, partial cds
6737	19571	32804	3.01	1.0E-09	AB032973.1	NT	Homo sapiens mRNA for KIAA1147 protein, partial cds
6782	19528	32554	1.14	1.0E-09	BE531007.1	EST_HUMAN	601278532F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3610814 5'
6782	19528	32555	1.14	1.0E-09	BE531007.1	EST_HUMAN	601278532F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3610814 5'
10073	22721	35937	4.91	1.0E-09	BE245070.1	EST_HUMAN	TCBAP1E2678 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP2678
10073	22721	35938	4.91	1.0E-09	BE245070.1	EST_HUMAN	TCBAP1E2678 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP2678
10188	22818	36034	1.38	1.0E-09	AB014607.1	NT	Homo sapiens mRNA for KIAA0707 protein, partial cds
10314	22861	36177	0.57	1.0E-09	BF528429.1	EST_HUMAN	602043782F1 NCI_CGAP_Brn67 Homo sapiens cDNA clone IMAGE:4181325 5'
10782	23465		10.52	1.0E-09	4504918	NT	Homo sapiens keratin 8 (KRT8) mRNA
11984	24512	37281	1.74	1.0E-09	BF125887.1	EST_HUMAN	601762902F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:4026785 5'
12386	24789		4.45	1.0E-09	A1809894.1	EST_HUMAN	wf84a08.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2360390 3' similar to contains Alu repetitive element; contains element MIR repetitive element

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2331	15501	27791	2.08	8.0E-70	AA230303.1	EST_HUMAN	nc13d12.1 NC1_CGAP_P1 Homo sapiens cDNA clone IMAGE:1008023
4340	17079	29708	1.93	8.0E-70	L77696.1	NT	Homo sapiens DGS-1 mRNA, 3' and
1808	14546	27280	1.01	7.0E-70	A1497807.1	EST_HUMAN	tm89f01.x1 NC1_CGAP_Bn25 Homo sapiens cDNA clone IMAGE:2165305 3'
1806	14546	27261	1.01	7.0E-70	A1497807.1	EST_HUMAN	tm89f01.x1 NC1_CGAP_Bn25 Homo sapiens cDNA clone IMAGE:2165305 3'
1923	14690	27371	1.66	7.0E-70	AA282855.1	EST_HUMAN	z115h04.1 NC1_CGAP_GC81 Homo sapiens cDNA clone IMAGE:713239 5'
2056	14788		2.92	7.0E-70	5031688	NT	Homo sapiens tumor suppressor deleted in oral cancer-related 1 (DOC-1R) mRNA
4199	16940	28566	3.67	7.0E-70	4757723	NT	Homo sapiens adenylate cyclase 3 (ADCY3) mRNA
5395	18195	30888	4.88	7.0E-70	AB032369.1	NT	Homo sapiens MIST mRNA, partial cds
5395	18195	30889	4.88	7.0E-70	AB032369.1	NT	Homo sapiens MIST mRNA, partial cds
6828	19487	32509	2.16	7.0E-70	AJ000052.1	NT	Homo sapiens gene encoding splicing factor SF1, exons 2-8
8330	21023	34159	2.2	7.0E-70	AB037715.1	NT	Homo sapiens mRNA for KIAA1294 protein, partial cds
8330	21023	34160	2.2	7.0E-70	AB037715.1	NT	Homo sapiens mRNA for KIAA1294 protein, partial cds
8622	21314	34457	3.58	7.0E-70	M74098.1	NT	Human displacement protein (CCAAT) mRNA
8622	21314	34458	3.58	7.0E-70	M74098.1	NT	Human displacement protein (CCAAT) mRNA
9055	21744	34902	3.8	7.0E-70	X59841.1	NT	Human PBX3 mRNA
9055	21744	34903	3.8	7.0E-70	X59841.1	NT	Human PBX3 mRNA
9335	20408	33522	3.43	7.0E-70	AF153715.1	NT	Homo sapiens phospholipid scramblase 1 gene, exon 1 and 5' flanking region
9361	20431	33551	2.89	7.0E-70	11525984	NT	Homo sapiens karyopherin beta 2b, transportin (TRN2), mRNA
9361	20431	33552	2.89	7.0E-70	11525984	NT	Homo sapiens karyopherin beta 2b, transportin (TRN2), mRNA
9556	22209	35394	0.57	7.0E-70	4557624	NT	Homo sapiens glutamate-cysteine ligase (gamma-glutamylcysteine synthetase), catalytic (72 kD) (GLCLC) mRNA
10198	22844	36058	0.62	7.0E-70	AB036429.1	NT	Homo sapiens NDST4 mRNA for N-deacetylase/N-sulfotransferase 4, complete cds
10198	22844	36059	0.62	7.0E-70	AB036429.1	NT	Homo sapiens NDST4 mRNA for N-deacetylase/N-sulfotransferase 4, complete cds
11010	23682	36941	1.54	7.0E-70	11429685	NT	Homo sapiens spastic paraplegia 4 (autosomal dominant; spastin) (SPG4), mRNA
11010	23682	36942	1.54	7.0E-70	11429685	NT	Homo sapiens spastic paraplegia 4 (autosomal dominant; spastin) (SPG4), mRNA
11597	24198	37515	1.65	7.0E-70	11526319	NT	Homo sapiens HIR (histone cell cycle regulation defective, S. cerevisiae) homolog A (HIRA), mRNA
11597	24198	37516	1.65	7.0E-70	11526319	NT	Homo sapiens HIR (histone cell cycle regulation defective, S. cerevisiae) homolog A (HIRA), mRNA
851	13021	20291	1.77	6.0E-70	4502106	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
2133	14863	27593	1.21	6.0E-70	M30638.1	NT	Human Ku (p70/p80) subunit mRNA, complete cds
2513	15230	27970	1.22	6.0E-70	5823899	NT	Homo sapiens CMP-N-acetylneuraminic acid synthase (LOC55607), mRNA
2555	15598	28003	2.18	5.0E-70	7662307	NT	Homo sapiens KIAA0792 gene product (KIAA0792), mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2555	15508	28004	2.18	5.0E-70	7682307	NT	Homo sapiens KIAA0792 gene product (KIAA0792), mRNA
11974	24519		2.75	5.0E-70	BE106034.1	EST_HUMAN	MR3-HT0487-150200-115-g06 HT0487 Homo sapiens cDNA
6956	19417	32431	1.03	4.0E-70	T08037.1	EST_HUMAN	EST03928 Fetal brain, Striatum (cat#938208) Homo sapiens cDNA clone HFBDN25
6956	19413	32653	1.78	4.0E-70	AW793228.1	EST_HUMAN	GM4-JM0003-010300-105-g08 UM0003 Homo sapiens cDNA
6956	19413	32654	1.78	4.0E-70	AW793228.1	EST_HUMAN	GM4-JM0003-010300-105-g08 UM0003 Homo sapiens cDNA
1584	14330	27016	1.23	3.0E-70	BE071798.1	EST_HUMAN	RC0-BT0522-071299-011-a12 BT0522 Homo sapiens cDNA
1584	14330	27017	1.23	3.0E-70	BE071798.1	EST_HUMAN	RC0-BT0522-071299-011-a12 BT0522 Homo sapiens cDNA
5532	18330	31234	0.65	3.0E-70	11430988	NT	Homo sapiens plakophilin 4 (PKP4), mRNA
5532	18330	31235	0.65	3.0E-70	11430988	NT	Homo sapiens plakophilin 4 (PKP4), mRNA
5955	18842	31581	1.8	3.0E-70	A1831976.1	EST_HUMAN	wh00d03.x1 NCI_CGAP_GLL1 Homo sapiens cDNA clone IMAGE:2388005 3'
6280	19053	32031	1.85	3.0E-70	BF685233.1	EST_HUMAN	602141561F1 NIH_MGC_46 Homo sapiens cDNA clone IMAGE:4302808 5'
6280	19053	32032	1.85	3.0E-70	BF685233.1	EST_HUMAN	602141561F1 NIH_MGC_46 Homo sapiens cDNA clone IMAGE:4302808 5'
10008	22858	35889	0.58	3.0E-70	BE502873.1	EST_HUMAN	h281h02.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3214419 3'
37	12865	25484	1.2	2.0E-70	AF012872.1	NT	Homo sapiens phosphatidylinositol 4-kinase 230 (p4K230) mRNA, complete cds
673	13449	26089	14.09	2.0E-70	N42161.1	EST_HUMAN	y07a10.1 Scores melanocyte 2N6HM Homo sapiens cDNA clone IMAGE:270522 5' similar to SW:D3HL_RAT P28286 3-HYDROXYISOBUTYRATE DEHYDROGENASE PRECURSOR ;
673	13449	26090	14.09	2.0E-70	N42161.1	EST_HUMAN	y07a10.1 Scores melanocyte 2N6HM Homo sapiens cDNA clone IMAGE:270522 5' similar to SW:D3HL_RAT P28286 3-HYDROXYISOBUTYRATE DEHYDROGENASE PRECURSOR ;
689	13464	26113	1.7	2.0E-70	A1246899.1	EST_HUMAN	qp51h01.x1 NCI_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2004913 3'
1000	13760	28421	1.56	2.0E-70	8823689	NT	Homo sapiens hypothetical protein FLJ20768 (FLJ20768), mRNA
1161	13915	26578	3.05	2.0E-70	7661983	NT	Homo sapiens KIAA0183 gene product (KIAA0183), mRNA
1161	13915	26579	3.05	2.0E-70	7661983	NT	Homo sapiens KIAA0183 gene product (KIAA0183), mRNA
1736	14478	27177	1.86	2.0E-70	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
2318	15043		5.32	2.0E-70	AA054010.1	EST_HUMAN	Zf48g04.r1 Scores retina N2b44HR Homo sapiens cDNA clone IMAGE:380214 5' similar to SW:GAG_HTL1A
3615	16368	20011	0.78	2.0E-70	H37988.1	EST_HUMAN	P03345 GAG POLYPROTEIN ;
4027	16772	29404	5.06	2.0E-70	M99181.1	NT	yp58b04.r1 Scores fetal liver spleen 1N1LS Homo sapiens cDNA clone IMAGE:191569 5'
5428	18227	30839	8.7	2.0E-70	X72662.1	NT	Human nonmuscle myosin heavy chain-B (MYH10) mRNA, partial cds
5428	18227	30940	8.7	2.0E-70	X72662.1	NT	H. sapiens gene for schwannomin (CS8)
6111	18888	31857	1.27	2.0E-70	AF310105.1	NT	H. sapiens gene for schwannomin (CS8)
6538	19303	32307	1.75	2.0E-70	D12625.1	NT	Homo sapiens NALP1 mRNA, complete cds
6569	19333	32342	12.14	2.0E-70	AF123074.1	NT	Human mRNA for NF1 protein isoform (neurofibromin isoform), complete cds
6569	19333	32343	12.14	2.0E-70	AF123074.1	NT	Homo sapiens cytoplasmic dynein intermediate chain 1 mRNA, complete cds
6569	19333	32343	12.14	2.0E-70	AF123074.1	NT	Homo sapiens cytoplasmic dynein intermediate chain 1 mRNA, complete cds



Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6897	17973	30530	1.08	2.0E-70	11422042	NT	Homo sapiens sialyltransferase 6 (N-acetylglucosaminide alpha 2,3-sialyltransferase) (SIAT6), mRNA
7303	19886	33062	0.76	2.0E-70	AF288207.1	NT	Homo sapiens cysteinyl-fRNA synthetase mRNA, complete cds, alternatively spliced
7819	20514	33639	9.02	2.0E-70	M21741.1	NT	Human guanine nucleotide-binding protein alpha-subunit gene (G-e-alpha), exons 4 and 5
8121	20815	33951	0.5	2.0E-70	11423899	NT	Homo sapiens amylo-1,6-glucosidase, 4-alpha-glucanotransferase (glycogen debranching enzyme, glycogen storage disease type III) (AGL), mRNA
8558	21250		0.8	2.0E-70	H47950.1	EST_HUMAN	yp79g02.1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:193682 5'
9067	21756	34918	0.85	2.0E-70	11526355	NT	Homo sapiens dynactin p82 subunit (LOC51194), mRNA
10038	22886	35904	1.46	2.0E-70	AF123303.1	NT	Homo sapiens calcium-binding transporter mRNA, partial cds
10500	23146	36373	0.47	2.0E-70	AB033042.1	NT	Homo sapiens mRNA for KIAA1216 protein, partial cds
11005	23677	36833	3.75	2.0E-70	8823420	NT	Homo sapiens hypothetical protein FLJ20450 (FLJ20450), mRNA
11005	23677	36834	3.75	2.0E-70	8823420	NT	Homo sapiens hypothetical protein FLJ20450 (FLJ20450), mRNA
11639	24236	37559	7.32	2.0E-70	4503520	NT	Homo sapiens eukaryotic translation initiation factor 3, subunit 6 (48kD) (EIF3S6) mRNA
12353	24757	31058	3.06	2.0E-70	11430460	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
12353	24757	31059	3.06	2.0E-70	11430460	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
3388	16147		2.83	1.0E-70	4507478	NT	Homo sapiens transglutaminase 3 (E polypeptide, protein-glutamine-gamma-glutamyltransferase) (TGM3) mRNA
9180	21850		0.89	1.0E-70	W85795.1	EST_HUMAN	z155g05.1 Soares fetal liver spleen 1NFLS_S1 Homo sapiens cDNA clone IMAGE:410024 5'
9698	22349		0.65	1.0E-70	AA442292.1	EST_HUMAN	z154c03.1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:757444 5'
10852	23632	36777	7.13	1.0E-70	AV738538.1	EST_HUMAN	AV738538 CB Homo sapiens cDNA clone CBLGB10 5'
5854	18641	31579	7.05	9.0E-71	AI143870.1	EST_HUMAN	q04f01.x1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1736008 3' similar to TR:O14045
5854	18641	31580	7.05	9.0E-71	AI143870.1	EST_HUMAN	O14045 PHOSPHOTRANSFERASE ;
6832	19868	32714	2.23	9.0E-71	AI954803.1	EST_HUMAN	q04f01.x1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1738009 3' similar to TR:O14045
11508	19868	32714	4.79	9.0E-71	AI954803.1	EST_HUMAN	w63b05.x1 NCI_CGAP_G08 Homo sapiens cDNA clone IMAGE:2309288 3' similar to TR:P97213 P97213 CDU2, CDU1, TCDD, TCDB, TCDE, TCDA, TCDC, CDD1, CDD2, CDD3, AND CDD4 GENES. ;
8968	21658		5.03	8.0E-71	AA171451.1	EST_HUMAN	w63b05.x1 NCI_CGAP_G08 Homo sapiens cDNA clone IMAGE:2309288 3' similar to TR:P97213 P97213 CDU2, CDU1, TCDD, TCDB, TCDE, TCDA, TCDC, CDD1, CDD2, CDD3, AND CDD4 GENES. ;
7275	19859	33036	8.9	7.0E-71	AA442230.1	EST_HUMAN	z154d11.1 Soares neuroepithelium (#637231) Homo sapiens cDNA clone IMAGE:610101 5' similar to TR:G1143061 STRAIN XA34 POL ;
8578	21270	34408	1.02	7.0E-71	AA705457.1	EST_HUMAN	z154d11.1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:758075 5'
11302	23961	37262	2.07	7.0E-71	AL163210.2	NT	z154d11.1 Soares fetal liver spleen 1NFLS_S1 Homo sapiens cDNA clone IMAGE:462226 3'
2207	14835	27673	5.97	5.0E-71	AF056322.1	NT	Homo sapiens chromosome 21 segment HS21C010
							Homo sapiens SP100-HMG nuclear autoantigen (SP100) mRNA, complete cds

Table 4  
Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4101	16844	29472	1.36	5.0E-71	AW816405.1	EST_HUMAN	QV4-ST0234-181100-037-05 ST0234 Homo sapiens cDNA
6790	18581	31508	2.23	5.0E-71	4502740	NT	Homo sapiens cyclin-dependent kinase 9 (CDK9) mRNA
6964	19328	32338	1.42	5.0E-71	11641408	NT	Homo sapiens keratin, hair, acidic, 7 (KRT1A7), mRNA
6821	19482	32504	1.43	5.0E-71	7682209	NT	Homo sapiens KIAA0823 gene product (KIAA0823), mRNA
6878	17954	30550	0.62	5.0E-71	AB033106.1	NT	Homo sapiens mRNA for KIAA1280 protein, partial cds
6878	17954	30551	0.62	5.0E-71	AB033106.1	NT	Homo sapiens mRNA for KIAA1280 protein, partial cds
7046	19737	32798	0.78	5.0E-71	11431590	NT	Homo sapiens protein kinase C, beta 1 (PRKCB1), mRNA
7410	20087	33171	1.47	5.0E-71	M58106.1	NT	Human neurofibromin protein type 1 mRNA, 3' end of cds
7607	20273	33381	0.75	5.0E-71	11526445	NT	Homo sapiens MAGUK protein p57, Protein Associated with Lins 2 (LOC51678), mRNA
7634	20289	33408	22.68	5.0E-71	AF072810.1	NT	Homo sapiens transcription factor WSTF mRNA, complete cds
8421	21114	34261	0.81	5.0E-71	5463777	NT	Homo sapiens nuclear factor related to kappa B binding protein (NFKB) mRNA
8421	21114	34252	0.81	5.0E-71	5463777	NT	Homo sapiens nuclear factor related to kappa B binding protein (NFKB) mRNA
9811	22462		2.67	5.0E-71	X13467.1	NT	Human PreA4 gene for Alzheimer's disease A4 amyloid protein precursor (exon 2)
10530	23227	36461	1.45	5.0E-71	5729600	NT	Homo sapiens IGF-II mRNA-binding protein 3 (KOC1), mRNA
10801	23581	36831	2.93	5.0E-71	11439514	NT	Homo sapiens pro-platelet basic protein (includes platelet basic protein, beta-thromboglobulin, connective tissue-activating peptide III, neutrophil-activating peptide-2) (PPBP), mRNA
11147	23814	37097	2.57	5.0E-71	11438069	NT	Homo sapiens similar to hypothetical protein FLJ20163 (H. sapiens) (LOC83325), mRNA
340	13141	25778	102.7	4.0E-71	AF157626.1	NT	Equus caballus glyceraldehyde-3-phosphate dehydrogenase mRNA, partial cds
340	13141	25779	102.7	4.0E-71	AF157626.1	NT	Equus caballus glyceraldehyde-3-phosphate dehydrogenase mRNA, partial cds
2889	15656	28209	1.97	4.0E-71	4505880	NT	Homo sapiens plasminogen (PLG) mRNA
4394	17131	29782	3.37	4.0E-71	AF056322.1	NT	Homo sapiens SP100-HMG nuclear autoantigen (SP100) mRNA, complete cds
4828	17684	30286	5.57	4.0E-71	7657602	NT	Homo sapiens putative heme-binding protein (SOUL), mRNA
5089	17788	30404	1.1	4.0E-71	7018352	NT	Homo sapiens cofactor required for Sp1 transcriptional activation, subunit 3 (130KD) (CRSP3), mRNA
7833	20628		1.41	3.0E-71	AU135734.1	EST_HUMAN	AU135734 PLACE1 Homo sapiens cDNA clone IMAGE1002775 5'
10591	23285	39523	3.38	3.0E-71	AA567683.1	EST_HUMAN	nl45n10.s1 NCI_CGAP_P14 Homo sapiens cDNA clone IMAGE1043683 similar to contains PTR5.13 PTR5 repetitive element;
1208	13959	26626	2.02	2.0E-71	AL163206.2	NT	Homo sapiens chromosome 21 segment HS21C008
5237	18043	30672	8.24	2.0E-71	D87462.1	NT	Homo sapiens mRNA for KIAA0272 gene, partial cds
5237	18043	30673	8.24	2.0E-71	D87462.1	NT	Human mRNA for KIAA0272 gene, partial cds
6871	17948	30543	0.55	2.0E-71	AL042438.1	EST_HUMAN	DKFZp434D1721_11 434 (synonym: hba3) Homo sapiens cDNA clone DKFZp434D1721 5'
8803	21594	34735	0.84	2.0E-71	BF195595.1	EST_HUMAN	7n85c11.xt NCI_CGAP_Ov18 Homo sapiens cDNA clone IMAGE3571221 3' similar to TR-Q9Z165 Q9Z165 PUTATIVE FOUR REPEAT ION CHANNEL ;

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10485	23131	36357	3.88	2.0E-71	AF085703.1	NT	Homo sapiens short chain L-3-hydroxyacyl-CoA dehydrogenase precursor (HADHSC) gene, nuclear gene encoding mitochondrial protein, complete cds
10485	23131	36358	3.88	2.0E-71	AF085703.1	NT	Homo sapiens short chain L-3-hydroxyacyl-CoA dehydrogenase precursor (HADHSC) gene, nuclear gene encoding mitochondrial protein, complete cds
10583	23287	36524	3.21	2.0E-71	BE018477.1	EST_HUMAN	bb81a08.y1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3048794.5' similar to SW-R23B_HUMAN p84727 UV EXCISION REPAIR PROTEIN RAD23 HOMOLOG B ;
11552	24151	37463	1.36	2.0E-71	BF149173.1	EST_HUMAN	Tm0022 Human Epidermal Keratinocyte Subtraction Library- Upregulated Transcripts Homo sapiens cDNA similar to gi 6598881
11552	24151	37464	1.36	2.0E-71	BF149173.1	EST_HUMAN	Tm0022 Human Epidermal Keratinocyte Subtraction Library- Upregulated Transcripts Homo sapiens cDNA similar to gi 6598881
11576	24175	37480	2.35	2.0E-71	R55628.1	EST_HUMAN	y77c11.1.T Scores breast 2N4HBst Homo sapiens cDNA clone IMAGE:164772.6'
12038	24561		8.43	2.0E-71	T95489.1	EST_HUMAN	ye43e09.f1 Scores fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:120520.5'
623	13402	28037	1.83	1.0E-71	A077827.1	EST_HUMAN	oy15e03.s1 Scores_senscent_fibroblasts NBHSF Homo sapiens cDNA clone IMAGE:1685916.3' similar to contains LOR1 b2 LOR1 repetitive element ;
920	13687	28351	2.37	1.0E-71	7708281	NT	Homo sapiens neuronal cell death-related protein (LOC51618), mRNA
1078	13836	28494	6.15	1.0E-71	AF205890.1	NT	Homo sapiens disabled-2 gene, exons 2 through 15 and complete cds
1317	14086	28740	11.71	1.0E-71	AF012872.1	NT	Homo sapiens phosphatidylinositol 4-kinase 230 (p4K230) mRNA, complete cds
2074	14806	27638	1.38	1.0E-71	AB017007.1	NT	Homo sapiens PMS2L16 mRNA, partial cds
2074	14806	27637	1.38	1.0E-71	AB017007.1	NT	Homo sapiens PMS2L16 mRNA, partial cds
2698	15407	28142	3.91	1.0E-71	7657153	NT	Homo sapiens hally/enhancer-of-split related with YRPW motif-like (HEYL), mRNA
3483	16249	28903	2.53	1.0E-71	AF118866.1	NT	Homo sapiens inorganic pyrophosphatase mRNA, complete cds
3583	16338	28982	5.88	1.0E-71	AF246219.1	NT	Homo sapiens SNARE protein kinase SNAK mRNA, complete cds
3583	16338	28983	5.88	1.0E-71	AF246219.1	NT	Homo sapiens SNARE protein kinase SNAK mRNA, complete cds
3639	16392	29031	0.98	1.0E-71	BE122850.1	EST_HUMAN	02_15 Human Epidermal Keratinocyte Subtraction Library- Upregulated Transcripts Homo sapiens cDNA clone 02_15 5' similar to Homo sapiens chromosome 19
3639	16392	29032	0.98	1.0E-71	BE122850.1	EST_HUMAN	02_15 Human Epidermal Keratinocyte Subtraction Library- Upregulated Transcripts Homo sapiens cDNA clone 02_15 5' similar to Homo sapiens chromosome 19
3724	16477	29114	2	1.0E-71	AF218804.1	NT	Homo sapiens attractin precursor (ATRIN) gene, exon 19
4437	17173	29801	1.92	1.0E-71	D28476.1	NT	Human mRNA for KIAA0045 gene, complete cds
4562	17287	29916	0.98	1.0E-71	H23178.1	EST_HUMAN	ym58h10.f1 Scores infant brain 1N1B Homo sapiens cDNA clone IMAGE:52528.6'
6643	19405	32420	1.07	1.0E-71		NT	Homo sapiens GCN5 (general control of amino-acid synthesis, yeast, homolog)-like 2 (GCN5L2), mRNA
6886	19879	32728	1.39	1.0E-71	AB011131.1	NT	Homo sapiens mRNA for KIAA0559 protein, partial cds
7211	19896	32971	13.35	1.0E-71	U80753.1	NT	Homo sapiens CAGL79 mRNA, partial cds

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8046	20740	33872	0.89	1.0E-71	AF105287.1	NT	Homo sapiens glycican-6 (GPC6) mRNA, complete cds
8089	20763	33891	2.26	1.0E-71	11425430	NT	Homo sapiens myomesin (M-protein) 2 (185kD) (MYOM2), mRNA
8345	21038	34174	4.09	1.0E-71	8922811	NT	Homo sapiens hypothetical protein FLJ10998 (FLJ10998), mRNA
8345	21038	34175	4.09	1.0E-71	8922811	NT	Homo sapiens hypothetical protein FLJ10998 (FLJ10998), mRNA
9128	21816	34982	0.78	1.0E-71	S72393.1	NT	CSNK2A1-casein kinase II (CKII) subunit alpha [human, Genomic, 18862 nt]
9908	22557	35752	7.99	1.0E-71	AY007643.1	NT	Homo sapiens cytochrome c oxidase subunit VIIa-related protein gene, complete cds
9988	22816		2.05	1.0E-71	AV761217.1	EST_HUMAN	AV761217 MDS Homo sapiens cDNA clone MDSEIA03 5'
10436	23082	36308	1.45	1.0E-71	11433142	NT	Homo sapiens activated leucocyte cell adhesion molecule (ALCAM), mRNA
10884	23375		2.68	1.0E-71	AV761217.1	EST_HUMAN	AV761217 MDS Homo sapiens cDNA clone MDSEIA03 5'
10786	23478	36720	2.19	1.0E-71	11418903	NT	Homo sapiens coagulation factor XIII, A1 polypeptide (F13A1), mRNA
11093	23763	37037	1.73	1.0E-71	11417191	NT	Homo sapiens leucylcystinyl aminopeptidase (LNPEP), mRNA
11093	23763	37038	1.73	1.0E-71	11417191	NT	Homo sapiens leucylcystinyl aminopeptidase (LNPEP), mRNA
12401	24786		4.96	1.0E-71	AB011398.1	NT	Homo sapiens gene for AF-3, complete cds
398	13183	25830	1.72	9.0E-72	A1857635.1	EST_HUMAN	wk95g03.x1 NCI CGAP Lu19 Homo sapiens cDNA clone IMAGE:2423188 3' similar to TR:O86705 O86705 HYPOTHETICAL 38.6 KD PROTEIN, ;contains Alu repetitive element
398	13183	25831	1.72	9.0E-72	A1857635.1	EST_HUMAN	wk95g03.x1 NCI CGAP Lu19 Homo sapiens cDNA clone IMAGE:2423188 3' similar to TR:O86705 O86705 HYPOTHETICAL 38.6 KD PROTEIN, ;contains Alu repetitive element
6020	18801	31762	0.97	8.0E-72	BF035752.1	EST_HUMAN	601458747F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3862451 5'
4092	16834	29458	2.63	7.0E-72	4501866	NT	Homo sapiens acetylase 2, mitochondrial (ACO2), nuclear gene encoding mitochondrial protein, mRNA
4092	16834	29459	2.63	7.0E-72	4501866	NT	Homo sapiens acetylase 2, mitochondrial (ACO2), nuclear gene encoding mitochondrial protein, mRNA
4092	16834	29460	2.63	7.0E-72	4501866	NT	Homo sapiens acetylase 2, mitochondrial (ACO2), nuclear gene encoding mitochondrial protein, mRNA
7024	19716	32773	2.99	7.0E-72	S41694.1	NT	[pseudogene] PTMAP2=prothymosin alpha [human, Genomic, 1182 nt, segment 2 of 3]
12620	24898		1.9	7.0E-72	F26259.1	EST_HUMAN	HSPD13670 HM3 Homo sapiens cDNA clone s4000051G02
8283	20977		4.14	6.0E-72	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
60	12889	25521	1.08	5.0E-72	BF333707.1	EST_HUMAN	QV0-CS0010-150900-398-e11 CS0010 Homo sapiens cDNA
60	12889	25522	1.08	5.0E-72	BF333707.1	EST_HUMAN	QV0-CS0010-150900-398-e11 CS0010 Homo sapiens cDNA
61	12889	25521	3.47	5.0E-72	BF333707.1	EST_HUMAN	QV0-CS0010-150900-398-e11 CS0010 Homo sapiens cDNA
61	12889	25522	3.47	5.0E-72	BF333707.1	EST_HUMAN	QV0-CS0010-150900-398-e11 CS0010 Homo sapiens cDNA
1117	13874		3.62	5.0E-72	L11945.1	NT	Homo sapiens alpha-tubulin mRNA, complete cds
6851	19551	32581	1.59	5.0E-72	AU128584.1	EST_HUMAN	AU128584 NT2RP2 Homo sapiens cDNA clone NT2RP2003751 5'

Table 4  
Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7731	20394	33509	0.73	5.0E-72	AA310632.1	EST_HUMAN	EST188312 HCC cell line (metastasis to liver in mouse)    Homo sapiens cDNA 5' end similar to similar to FAC1
8676	21367	34514	3.71	5.0E-72	AW161274.1	EST_HUMAN	eu80c03.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2782564 5' similar to
9861	22511	35708	0.89	5.0E-72	AV724632.1	EST_HUMAN	TR:Q99785 Q99785 HYPOTHETICAL 32.4 KD PROTEIN ; contains element MSR1 repetitive element ;
11208	23871	37157	3.45	5.0E-72	BF331571.1	EST_HUMAN	AV724632 HTB Homo sapiens cDNA clone HTBAK801 5'
11643	24240	37563	3.45	5.0E-72	BF331571.1	EST_HUMAN	MR4-BT0568-010600-005-005 BT0568 Homo sapiens cDNA
11843	24240	37564	1.61	5.0E-72	BE208545.1	EST_HUMAN	MR4-BT0568-010600-005-005 BT0568 Homo sapiens cDNA
12107	25358	37564	1.61	5.0E-72	BE208545.1	EST_HUMAN	ba08g08.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823806 5'
5378	18178	30868	2.82	5.0E-72	BE288946.1	EST_HUMAN	ba08g08.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823806 5'
8462	19229	32230	0.68	4.0E-72	AF170025.1	NT	QV1-BT0832-280800-342-a10 BT0832 Homo sapiens cDNA
7309	19982	33069	2.03	4.0E-72	T87947.1	EST_HUMAN	Homo sapiens zinc finger protein ZFP-65 (ZFP96) mRNA, alternatively spliced, complete cds
9884	22336	35531	1.3	4.0E-72	8923069	NT	yd33a01.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:115752 5' similar to
10262	22939	36152	0.48	4.0E-72	AW838230.1	EST_HUMAN	SP:A44282 A44282 RETROVIRUS-RELATED POLYPROTEIN - HUMAN ;
10262	22939	36153	0.48	4.0E-72	AW838230.1	EST_HUMAN	Homo sapiens hec domain and RLD 2 (HERC2), mRNA
10320	22967	36188	0.92	4.0E-72	AI248796.1	EST_HUMAN	Homo sapiens hypothetical protein FLJ20758 (FLJ20758), mRNA
11255	23917	37210	1.57	4.0E-72	AA465388.1	EST_HUMAN	RC3-LT0023-200100-012-411 LT0023 Homo sapiens cDNA
11514	24114	37424	7.78	4.0E-72	H79421.1	EST_HUMAN	q467c02.x1 Soares fetal liver spleen 1NFLS_S1 Homo sapiens cDNA clone IMAGE:1849730 3' similar to
11637	24234	37555	1.75	4.0E-72	7657057	NT	TR:Q14498 Q14498 SPLICING FACTOR, [1] ; contains Alu repetitive element; contains element L1 repetitive element ;
11637	24234	37558	1.76	4.0E-72	7657057	NT	aa23f09.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:814121 3' similar to SW:CPTR_FLAPR
11680	24275	37597	2.18	4.0E-72	T81910.1	EST_HUMAN	P49131 CHLOROPLAST TRIOSE PHOSPHATE TRANSLOCATOR PRECURSOR. ;
12453	24822	31025	8.92	4.0E-72	AJ277546.2	NT	P49131 CHLOROPLAST TRIOSE PHOSPHATE TRANSLOCATOR PRECURSOR. ;
18	12846	25459	0.69	3.0E-72	5031976	NT	yu28a03.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:235084 5'
883	13652		1.52	3.0E-72	AA723823.1	EST_HUMAN	Homo sapiens eukaryotic translation initiation factor 2B, subunit 2 (beta, 39kD) (EIF2B2), mRNA
							Homo sapiens eukaryotic translation initiation factor 2B, subunit 2 (beta, 39kD) (EIF2B2), mRNA
							yd28a09.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:109849 3'
							Homo sapiens WEE1 gene for protein kinase and partial ZNF143 gene for zinc finger transcription factor
							Homo sapiens pre-B-cell colony-enhancing factor (PBEF) mRNA
							af63a06.s1 Soares testis_NHT Homo sapiens cDNA clone 1310290 3'

Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1132	13888	28546	6.64	3.0E-72	U16306.1	NT	Human chondroitin sulfate proteoglycan versican V0 splice-variant precursor peptide mRNA, complete cds
1132	13888	28547	6.64	3.0E-72	U16306.1	NT	Human chondroitin sulfate proteoglycan versican V0 splice-variant precursor peptide mRNA, complete cds
1171	13925	28587	0.72	3.0E-72	U80226.1	NT	Human gamma-aminobutyric acid transaminase mRNA, partial cds
1171	13925	28588	0.72	3.0E-72	U80226.1	NT	Human gamma-aminobutyric acid transaminase mRNA, partial cds
1510	14256	28942	1.24	3.0E-72	BE242161.1	EST_HUMAN	TCAAP1E1252 Pediatric acute myelogenous leukemia cell (FAB M1) Baylar-HGSC project=TCAA Homo sapiens cDNA clone TCAAP1252
3072	15838	28491	11.45	3.0E-72	AJ228043.1	NT	Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22, segment 3/3
3273	16034	28684	2.17	3.0E-72	8923548	NT	Homo sapiens hypothetical protein FLJ20585 (FLJ20585), mRNA
3903	16555	29186	2.69	3.0E-72	S77589.1	NT	TCR V delta 2-C alpha =T-cell receptor delta and C alpha fusion gene (alternatively spliced, splice junction)
4508	17243	29876	3.12	3.0E-72	11416196	NT	[human, precursor B-cell line REH, mRNA, partial, 211 nt]
4715	17447	30079	1.07	3.0E-72	AF167572.1	NT	Homo sapiens hypothetical protein (FLJ11127), mRNA
4715	17447	30080	1.07	3.0E-72	AF167572.1	NT	Homo sapiens protein methyltransferase (JBP1) mRNA, complete cds
4802	17591	30215	0.95	3.0E-72	AF054337.1	EST_HUMAN	Homo sapiens protein methyltransferase (JBP1) mRNA, complete cds
5433	18232		1.27	3.0E-72	4759093	NT	wb31a06.x1 NCI_CGAP_G08 Homo sapiens cDNA clone IMAGE:2307254 3'
5891	18676	31621	2.1	3.0E-72	AF073367.1	NT	Homo sapiens semaphorin W (SEMAW) mRNA
5891	18676	31622	2.1	3.0E-72	AF073367.1	NT	Homo sapiens growth factor receptor-bound protein 10 (GRB10) gene, exon 5
6074	18853	31819	4.82	3.0E-72	AB029004.1	NT	Homo sapiens growth factor receptor-bound protein 10 (GRB10) gene, exon 5
6074	18853	31820	4.82	3.0E-72	AB029004.1	NT	Homo sapiens mRNA for KIAA1081 protein, partial cds
6516	19281	32284	3.63	3.0E-72	4926987	NT	Homo sapiens mRNA for KIAA1081 protein, partial cds
7485	20157	33249	2.15	3.0E-72	U80017.1	NT	Homo sapiens ribosomal protein L3-like (RPL3L) mRNA
8075	20789	33868	0.98	3.0E-72	5031882	NT	Homo sapiens basic transcription factor 2 p44 (btf2p44) gene, partial cds, neuronal apoptosis inhibitory protein (nrip) and survival motor neuron protein (smn) genes, complete cds
10331	22978	36198	1.2	3.0E-72	X98289.1	NT	Homo sapiens nuclear receptor subfamily 1, group H, member 3 (NR1H3), mRNA
6869	18856	31597	1.91	2.0E-72	11428671	NT	Homo sapiens S100A12 gene for Calgranulin C, exon 2 and joined cds
8993	21653	34832	0.71	2.0E-72	BF308560.1	EST_HUMAN	Homo sapiens solute carrier family 13 (sodium-dependent dicarboxylate transporter), member 2 (SLC13A2), mRNA
8993	21653	34833	0.71	2.0E-72	BF308560.1	EST_HUMAN	601890419F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4131461 5'
10940	23331	38569	2.47	2.0E-72	AA789277.1	EST_HUMAN	601890419F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4131461 5'
12449	24819	31022	5.75	2.0E-72	AF182714.1	NT	4281009.s1 Soaree_teste_NHT Homo sapiens cDNA clone 1391609 3' similar to gb:U02067 H. sapiens mRNA for TSL RNA pseudogene (HUMAN);
2068	14800	27627	1.19	1.0E-72	AA846225.1	EST_HUMAN	Rattus norvegicus putative phosphatidylphosphorylcholine translocator mRNA, complete cds
							883402.s1 Soaree_papillary_tumor_Nishpa Homo sapiens cDNA clone IMAGE:1387395 3'

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5680	18473	31390	3.63	1.0E-72	7637676	NT	Homo sapiens vacuolar protein sorting 41 (yeast homolog) (VPS41), mRNA
6464	19231	32231	1.31	1.0E-72	11321578	NT	Homo sapiens myosin, heavy polypeptide 13, skeletal muscle (MYH13), mRNA
6464	19231	32232	1.31	1.0E-72	11321578	NT	Homo sapiens myosin, heavy polypeptide 13, skeletal muscle (MYH13), mRNA
6536	25093	32305	1.2	1.0E-72	AV751818.1	EST_HUMAN	AV751818 NPD Homo sapiens cDNA clone NPDAIE11 5'
7537	20207	33304	3.7	1.0E-72	BE175434.1	EST_HUMAN	RC4-HT0578-170300-012-g02 HT0578 Homo sapiens cDNA
7537	20207	33305	3.7	1.0E-72	BE175434.1	EST_HUMAN	RC4-HT0578-170300-012-g02 HT0578 Homo sapiens cDNA
9491	22144	35324	10.25	1.0E-72	AF222742.1	NT	Homo sapiens synaptic glycoprotein SC2 (SC2), complete cds
9491	22144	35325	10.25	1.0E-72	AF222742.1	NT	Homo sapiens synaptic glycoprotein SC2 (SC2), complete cds
1444	14191	26876	1.35	9.0E-73	AW374988.1	EST_HUMAN	MRO-C10063-071099-002-h11 CT0063 Homo sapiens cDNA
10871	23551		15.11	9.0E-73	11424098	NT	Homo sapiens ribosomal protein L13a (RPL13A), mRNA
1015	13774	28434	2.29	8.0E-73	AW071755.1	EST_HUMAN	ws55c06.x1 NC1 CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2601098 3' similar to TR:Q59050
6493	18292	31190	1	8.0E-73	4505798	NT	Q59050 HYPOTHETICAL PROTEIN MJ1658 ;
6478	19245	32245	5.16	8.0E-73	11428488	NT	Homo sapiens phosphatidylinositol 3-kinase, class 2, alpha polypeptide (PIK3C2A), mRNA
7994	20680	33817	2.87	8.0E-73	AF113129.1	NT	Homo sapiens lysozyme homolog (LOC57151), mRNA
							Homo sapiens vacuolar ATPase isoform VA68 mRNA, complete cds
9253	21932	35105	6.25	8.0E-73	BE019800.1	EST_HUMAN	bb2a06.y1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3030034 5' similar to gb:X04088_cds1 ACTIN, CYTOPLASMIC 2 (HUMAN); gb:M21496 Mouse cytoskeletal gamma-actin mRNA, complete cds (MOUSE);
9840	22292	35484	1.92	8.0E-73	11528037	NT	Homo sapiens interleukin 12 receptor, beta 1 (IL12RB1), mRNA
9840	22292	35485	1.92	8.0E-73	11528037	NT	Homo sapiens interleukin 12 receptor, beta 1 (IL12RB1), mRNA
10507	23163	36379	0.45	8.0E-73	4507628	NT	Homo sapiens transition protein 1 (during histone to protamine replacement) (TNF1), mRNA
11573	24172	37488	1.28	8.0E-73	11418788	NT	Homo sapiens DEAD-box protein (HAGE), mRNA
12506	24859	31012	3.31	8.0E-73	11418189	NT	Homo sapiens thyroid autoantigen 70kD (Ku antigen) (GZ2P-1), mRNA
1112	13869	26528	0.89	7.0E-73	8923200	NT	Homo sapiens hypothetical protein FLJ20309 (FLJ20309), mRNA
3295	16056	28705	1.18	7.0E-73	AL163208.2	NT	Homo sapiens chromosome 21 segment HS21C006
4891	17618		1.35	7.0E-73	AL163282.2	NT	Homo sapiens chromosome 21 segment HS21C082
154	12898		3.07	6.0E-73	AL163218.2	NT	Homo sapiens chromosome 21 segment HS21C018
7072	19763	32827	3.48	6.0E-73	BE166674.1	EST_HUMAN	QV0-HT0578-020300-137-003 HT0494 Homo sapiens cDNA
5173	17882	30497	2.2	4.0E-73	11422159	NT	Homo sapiens HELG protein (FAM441), mRNA
1318	14097	26741	2.77	3.0E-73	AW843788.1	EST_HUMAN	CN0-CH0554-280100-164-008 CN0044 Homo sapiens cDNA
6898	19381	32374	0.71	3.0E-73	AA198403.1	EST_HUMAN	zn05c04.v1 Stratiotes fetal retina 637202 Homo sapiens cDNA clone IMAGE:585850 3' similar to gb:Z23004_cds1 HETEROGENEOUS NUCLEAR RIBONUCLEOPROTEIN G (HUMAN);
8656	21348	34482	0.65	3.0E-73	AV729428.1	EST_HUMAN	AV729428 HTC Homo sapiens cDNA clone HTCAAF071 5'
8656	21348	34493	0.65	3.0E-73	AV729428.1	EST_HUMAN	AV729428 HTC Homo sapiens cDNA clone HTCAAF071 5'

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11611	24209		1.61	3.0E-73	AI004040.1	EST_HUMAN	ou11d02.x1 Scores_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1625955 3'
12734	25003		1.5	3.0E-73	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
12738	25005		1.54	3.0E-73	AW898081.1	EST_HUMAN	RC3-NN00068-270400-011-c04 NN00068 Homo sapiens cDNA
831	13601	26271	1.43	2.0E-73	AF136897.1	NT	Homo sapiens BASS1 (BASS1) mRNA, partial cds
1839	14674		1.78	2.0E-73	AW898081.1	EST_HUMAN	RC3-NN00068-270400-011-c04 NN00068 Homo sapiens cDNA
2286	15021		1.3	2.0E-73	U01317.1	NT	Human beta globin region on chromosome 11
3177	15940	28690	3.99	2.0E-73	4502582	NT	Homo sapiens caspase 8, apoptosis-related cysteine protease (CASP8) mRNA
3338	16294	28943	0.91	2.0E-73	7669539	NT	Homo sapiens Parkinson disease (autosomal recessive, juvenile) 2, parkin (PARK2), transcript variant 3, mRNA
3538	16294	28944	0.91	2.0E-73	7669539	NT	Homo sapiens Parkinson disease (autosomal recessive, juvenile) 2, parkin (PARK2), transcript variant 3, mRNA
4401	17138		1.03	2.0E-73	AL163283.2	NT	Homo sapiens chromosome 21 segment HS21C083
6344	19114	32102	0.89	2.0E-73	AF086824.1	NT	Mus musculus rho/rao-interacting citron kinase (Crik) mRNA, complete cds
6344	19114	32103	0.89	2.0E-73	AF086824.1	NT	Mus musculus rho/rao-interacting citron kinase (Crik) mRNA, complete cds
6389	19158	32159	6.27	2.0E-73	AB046811.1	NT	Homo sapiens mRNA for KIAA1591 protein, partial cds
6900	19383	32376	1.27	2.0E-73	11431471	NT	Homo sapiens interleukin 4 receptor (IL4R), mRNA
6900	19383	32377	1.27	2.0E-73	11431471	NT	Homo sapiens interleukin 4 receptor (IL4R), mRNA
7969	20362	33476	0.69	2.0E-73	M94048.1	NT	Human peripheral myelin protein 22 mRNA, complete cds
7701	20364	33478	0.73	2.0E-73	AB037750.1	NT	Homo sapiens mRNA for KIAA1329 protein, partial cds
9432	22110	35284	0.62	2.0E-73	AF198349.1	NT	Gallus gallus Dach2 protein (Dach2) mRNA, complete cds
9432	22110	35285	0.52	2.0E-73	AF198349.1	NT	Gallus gallus Dach2 protein (Dach2) mRNA, complete cds
10322	22969	36189	1.21	2.0E-73	4504168	NT	Homo sapiens glutathione synthetase (GSS) mRNA
10394	23040	36257	1.31	2.0E-73	11496980	NT	Homo sapiens supervillin (SVIL), transcript variant 1, mRNA
10394	23040	36258	1.31	2.0E-73	11496980	NT	Homo sapiens supervillin (SVIL), transcript variant 1, mRNA
10987	23662	36917	3.37	2.0E-73	4557612	NT	Homo sapiens galectosylceramidase (Krabbe disease) (GALC), mRNA
10987	23662	36918	3.37	2.0E-73	4557612	NT	Homo sapiens galectosylceramidase (Krabbe disease) (GALC), mRNA
11020	23982	36955	1.82	2.0E-73	AB028982.1	NT	Homo sapiens mRNA for KIAA1059 protein, partial cds
12293	14674		1.83	2.0E-73	AW898081.1	EST_HUMAN	RC3-NN00068-270400-011-c04 NN00068 Homo sapiens cDNA
1776	14518	27221	1.71	1.0E-73	AU121585.1	EST_HUMAN	AU121585 MAMMA1 Homo sapiens cDNA clone MAMMA1000490 5'
2488	15205	27946	1.12	1.0E-73	AF198349.1	NT	Gallus gallus Dach2 protein (Dach2) mRNA, complete cds
9266	19039	32015	1.07	1.0E-73	BE151283.1	EST_HUMAN	GM1-HT0282-111198-042-h10 HT0282 Homo sapiens cDNA
9399	22061	35230	1.37	1.0E-73	A147427.1	EST_HUMAN	qg61b07.r1 Scores_jeetis_NHT Homo sapiens cDNA clone IMAGE:1839837 5' similar to contains element MER22 repetitive element;
11428	23195	36426	2.95	1.0E-73	BE385477.1	EST_HUMAN	001276071F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3617105 5'



Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
723	13497	26150	1.06	8.0E-74	4557426	NT	Homo sapiens CD33-like 4 (CD33L4) mRNA
5824	18613	31544	2.2	8.0E-74	S83194.1	NT	Ca2+/calmodulin-dependent protein kinase IV kinase isoform [rats, brain, mRNA, 3429 nt]
5824	18613	31545	2.2	8.0E-74	S83194.1	NT	Ca2+/calmodulin-dependent protein kinase IV kinase isoform [rats, brain, mRNA, 3429 nt]
10791	23474		1.36	8.0E-74	N52239.1	EST_HUMAN	y46g10.a1 Soares fetal liver spleen 1NFS Homo sapiens cDNA clone IMAGE:246826 3'
1942	14677	27390	2.59	7.0E-74	AJ001689.1	NT	Homo sapiens NK02D gene, exon 10
3322	18082	28732	1.08	7.0E-74	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
9142	21873	35038	2.83	7.0E-74	BE067432.1	EST_HUMAN	601640284F1 NIH_MGC_73 Homo sapiens cDNA clone IMAGE:3632897 5'
12505	24858	31011	5.51	7.0E-74	BE266305.1	EST_HUMAN	601191927F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3535855 5'
1100	13858	28518	2.4	6.0E-74	AF109007.1	NT	Homo sapiens S164 gene, partial cds; PS1 and hypothetical protein genes, complete cds, and S171 gene, partial cds
2314	15039	27776	11.78	6.0E-74	BE388280.1	EST_HUMAN	601283521F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3605453 5'
2314	15039	27777	11.78	6.0E-74	BE388280.1	EST_HUMAN	601283521F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3605453 5'
2867	15634	28279	1.32	6.0E-74	AW014036.1	EST_HUMAN	U1H-B10-seq-h-03-0-U1.a1 NCI CGAP Sub1 Homo sapiens cDNA clone IMAGE:2706365 3'
2867	15634	28280	1.32	6.0E-74	AW014036.1	EST_HUMAN	U1H-B10-seq-h-03-0-U1.a1 NCI CGAP Sub1 Homo sapiens cDNA clone IMAGE:2706365 3'
3700	16453	28062	1.34	6.0E-74	BE048946.1	EST_HUMAN	hr54e11.x1 NCI CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3132332 3'
3700	16453	28063	1.34	6.0E-74	BE048946.1	EST_HUMAN	hr54e11.x1 NCI CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3132332 3'
5281	18086	30744	3.02	6.0E-74	11058013	NT	Homo sapiens actin filament associated protein (AFAP), mRNA
865	13654	26322	7.33	5.0E-74	AW020986.1	EST_HUMAN	df17c08.y1 Morton Fetal Cochlea Homo sapiens cDNA clone IMAGE:2483704 5'
2706	15413		2.62	5.0E-74	AW362786.1	EST_HUMAN	PMO-CT0289-271099-001-h07 CT0289 Homo sapiens cDNA
5322	18126	30784	1.86	5.0E-74	11425417	NT	Homo sapiens phosphatidylinositol glycan, class L (PIGL), mRNA
5703	18497	31419	12.98	5.0E-74	X89670.1	NT	H. sapiens mRNA for TPCRT16 protein
5748	18540	31462					Homo sapiens VAMP (vesicle-associated membrane protein)-associated protein A (33kD) (VAPA) mRNA, and translated products
5819	18608	31536	7.41	5.0E-74	4507866	NT	Homo sapiens Interleukin 4 receptor (IL4R), mRNA
5819	18608	31537	1.84	5.0E-74	11431471	NT	Homo sapiens Interleukin 4 receptor (IL4R), mRNA
5819	18608	31537	1.84	5.0E-74	11431471	NT	Homo sapiens Interleukin 4 receptor (IL4R), mRNA
6795	19539	32567	5.98	5.0E-74	7682263	NT	Homo sapiens KIAA0716 gene product (KIAA0716), mRNA
7969	19539	32567	0.6	5.0E-74	7682263	NT	Homo sapiens KIAA0716 gene product (KIAA0716), mRNA
7936	20631	33758	2.78	5.0E-74	11345483	NT	Homo sapiens hypothetical protein FLJ13222 (FLJ13222), mRNA
10636	23328	36565	2.56	5.0E-74	Y09420.1	NT	H. sapiens mRNA for HIP-1
10636	23328	36566	2.56	5.0E-74	Y09420.1	NT	H. sapiens mRNA for HIP-1
10757	23442	36887	2.68	5.0E-74	5729768	NT	Homo sapiens cell adhesion molecule with homology to L1CAM (close homologue of L1) (CHL1), mRNA
273	13080	26723	1.79	4.0E-74	D87875.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
532	13002	26272	5.15	4.0E-74	AB028942.1	NT	Homo sapiens mRNA for KIAA1019 protein, partial cds

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1955	14690	27403	2.02	4.0E-74	AB026898.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
1955	14690	27404	2.02	4.0E-74	AB026898.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
2065	14797	27523	2.75	4.0E-74	4506192	NT	Homo sapiens proteasome (prosome, macropain) subunit, beta type, 1 (PSMB1) mRNA
2065	14797	27524	2.75	4.0E-74	4506192	NT	Homo sapiens proteasome (prosome, macropain) subunit, beta type, 1 (PSMB1) mRNA
2128	14859	27589	1.99	4.0E-74	AB032094.1	NT	Homo sapiens mRNA for KIAA1168 protein, partial cds
2427	15148	27882	27.23	4.0E-74	AJ009676.1	NT	Homo sapiens PLP gene
3088	15853	28495	5.2	4.0E-74	AJ009678.1	NT	Homo sapiens PLP gene
3518	16274	28928	0.82	4.0E-74	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
4041	16796	29414	1.03	4.0E-74	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
4520	17255	29889	2.23	4.0E-74	7662183	NT	Homo sapiens KIAA0559 gene product (KIAA0559), mRNA
4573	17308	29937	0.88	4.0E-74	Z17227.1	NT	Homo sapiens mRNA for transmembrane receptor protein
5015	17736	30343	0.96	4.0E-74	4504328	NT	Homo sapiens hydroxycy-Coenzyme A dehydrogenase3-ketocyl-Coenzyme A thiolase/Coenzyme A hydratase (trifunctional protein), beta subunit (HADHB) mRNA
5015	17736	30344	0.96	4.0E-74	4504328	NT	Homo sapiens hydroxycy-Coenzyme A dehydrogenase3-ketocyl-Coenzyme A thiolase/Coenzyme A hydratase (trifunctional protein), beta subunit (HADHB) mRNA
8448	21140		8.45	3.0E-74	AA300378.1	EST_HUMAN	EST13131 Thymus tumor lili Homo sapiens cDNA 5' and similar to similar to ribosomal protein L37
8473	21165	34309	0.79	3.0E-74	9069912	NT	Homo sapiens actin-related protein 3-beta (ARP3BETA), mRNA
9272	22026	35196	2.99	3.0E-74	M78994.1	EST_HUMAN	EST01132 Subtracted Hippocampus, Striatum (cat. #636205) Homo sapiens cDNA clone HHCFF91
10237	22895	36098	2.08	3.0E-74	AA601493.1	EST_HUMAN	not17g05.s1 NCI_CGAP_Phe1 Homo sapiens cDNA clone IMAGE:1100984 3'
938	13705	26370	175.01	2.0E-74	7689491	NT	Homo sapiens glyceraldehyde-3-phosphate dehydrogenase (GAPD), mRNA
938	13705	26371	175.01	2.0E-74	7689491	NT	Homo sapiens glyceraldehyde-3-phosphate dehydrogenase (GAPD), mRNA
1152	13907	26570	1.11	2.0E-74	AF020092.1	NT	Human endogenous retrovirus HERV-K-147D
1222	13972	26844	1.36	2.0E-74	A1900628.1	EST_HUMAN	wa51e07.x1 NCI_CGAP_Lu28 Homo sapiens cDNA clone IMAGE:2547204 3' similar to SW:GG95_HUMAN Q08379 GOLGIN-95; contains element MER22 repetitive element
1590	14336	27024	3.79	2.0E-74	4885193	NT	Homo sapiens epidermal growth factor receptor (avian erythroblastic leukemia viral (v-erb-b) oncogene homolog) (EGFR) mRNA
1590	14336	27025	3.79	2.0E-74	4885193	NT	Homo sapiens epidermal growth factor receptor (avian erythroblastic leukemia viral (v-erb-b) oncogene homolog) (EGFR) mRNA
2609	15321	28063	0.94	2.0E-74	A1557280.1	EST_HUMAN	PT2.1_15_G11.7 tumor2 Homo sapiens cDNA 3'
4945	17872	30281	2.44	2.0E-74	AL355092.1	NT	Novel human gene mapping to chromosome 22
4945	17872	30282	2.44	2.0E-74	AL355092.1	NT	Novel human gene mapping to chromosome 22

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4949	17676	30286	1.11	2.0E-74	J02963.1	NT	Human platelet glycoprotein IIb mRNA, 3' end
5709	25074	31424	2.9	2.0E-74	BE711134.1	EST_HUMAN	RCCHT0678-220500-011-C03 HT0678 Homo sapiens cDNA
5806	25077	31521	1.80	2.0E-74	11439587	NT	Homo sapiens PDZ-73 protein (PDZ-73/NY-CO-38), mRNA
5806	25077	31522	1.80	2.0E-74	11439587	NT	Homo sapiens PDZ-73 protein (PDZ-73/NY-CO-38), mRNA
5876	25077	31521	2.78	2.0E-74	11439587	NT	Homo sapiens PDZ-73 protein (PDZ-73/NY-CO-38), mRNA
5876	25077	31522	2.78	2.0E-74	11439587	NT	Homo sapiens PDZ-73 protein (PDZ-73/NY-CO-38), mRNA
7003	18895	32748	0.92	2.0E-74	BF030788.1	EST_HUMAN	601557524F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:3827549 5'
7841	20536	33663	1.28	2.0E-74	AB037816.1	NT	Homo sapiens mRNA for KIAA1395 protein, partial cds
9282	22036	35208	6.08	2.0E-74	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
12234	24987		3.95	2.0E-74	AA186181.1	EST_HUMAN	zp99a06.a1 Stratiogene muscle 937209 Homo sapiens cDNA clone IMAGE:628018 3'
52	12881	25509	1.89	1.0E-74	7687334	NT	Homo sapiens Misshep/NK-related kinase (MINK), mRNA
328	13129	25764	5.02	1.0E-74	AW816405.1	EST_HUMAN	QV4-ST0234-181190-037 405 ST0234 Homo sapiens cDNA
487	13272	25907	1.05	1.0E-74	8922828	NT	Homo sapiens hypothetical protein FLJ11028 (FLJ11028), mRNA
483	13277	25912	13.6	1.0E-74	X02344.1	NT	Homo sapiens beta 2 gene
587	13387	25995	1.47	1.0E-74	4508020	NT	Homo sapiens zinc finger protein 259 (ZNF259) mRNA
766	13638	26197	1.81	1.0E-74	AB020940.1	NT	Homo sapiens mRNA for KIAA0833 protein, partial cds
979	13744	26406	2.27	1.0E-74	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
2223	14851	27680	4.39	1.0E-74	AB002059.1	NT	Homo sapiens DNA for Human P20M, complete cds
3136	15900	28545	3.55	1.0E-74	4758967	NT	Homo sapiens mannosidase, alpha, class 2A, member 1 (MAN2A1), mRNA
3366	19125	28782	0.9	1.0E-74	AA258549.1	EST_HUMAN	zr60c01.J1 Soares_NH-IMPu_S1 Homo sapiens cDNA clone IMAGE:687776 5'
3366	19125	28783	0.9	1.0E-74	AA258549.1	EST_HUMAN	zr60c01.J1 Soares_NH-IMPu_S1 Homo sapiens cDNA clone IMAGE:687776 5'
3901	19851	29292	0.86	1.0E-74	4504116	NT	Homo sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1) mRNA
3901	19851	29293	0.86	1.0E-74	4504116	NT	Homo sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1) mRNA
3960	16700	29338	4.81	1.0E-74	AL163268.2	NT	Homo sapiens chromosome 21 segment HS21C088
4042	16787	29415	1.15	1.0E-74	BE083080.1	EST_HUMAN	RC2-BT0842-270300-019-106 BT0842 Homo sapiens cDNA
6905	18398	32380	1.86	1.0E-74	M80914.1	NT	Human neurofibromin (NF1) gene, complete cds
7526	20197	33291	1.15	1.0E-74	11417977	NT	Homo sapiens KIAA0852 protein (KIAA0852), mRNA
7955	20850	33773	1.13	1.0E-74	BE549106.1	EST_HUMAN	601070088F1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3456280 5'
7955	20850	33774	1.13	1.0E-74	BE549106.1	EST_HUMAN	601070088F1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3456280 5'
8704	21396	34543	4.82	1.0E-74	AF214562.1	NT	Homo sapiens tracheal epithelium enriched protein (PLUNC) gene, complete cds
8733	21425	34571	0.66	1.0E-74	BF351951.1	EST_HUMAN	MR0-HT0559-230600-021-a03 HT0559 Homo sapiens cDNA
10140	22788	36001	0.55	1.0E-74	AJ251550.1	NT	Homo sapiens partial AK155 gene for AK155 protein, exons 1-3 and joined CDS
10140	22788	36002	0.55	1.0E-74	AJ251550.1	NT	Homo sapiens partial AK155 gene for AK155 protein, exons 1-3 and joined CDS
10380	23028	36241	1.38	1.0E-74	11420549	NT	Homo sapiens hypothetical protein FLJ10783 (FLJ10783), mRNA

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11885	24458	37800	2.92	1.0E-74	11417856	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2), mRNA
11885	24513		5.01	1.0E-74	11417856	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2), mRNA
12103	14951	27690	1.58	1.0E-74	AB002059.1	NT	Homo sapiens DNA for Human P2M, complete cds
12567	24897		1.53	1.0E-74	AF240798.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) gene, complete cds
2050	15360		3.68	8.0E-75	AF176228.1	NT	Homo sapiens DNA cytosine-5 methyltransferase 3B (DNMT3B) mRNA, complete cds
12254	24700		1.80	8.0E-75	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
2319	15044	27781	1.47	6.0E-75	AJ817415.1	EST_HUMAN	wk38a08.x1 NCI_CGAP_P122 Homo sapiens cDNA clone IMAGE:2417854 3' similar to gb:M14123_cds4
7888	20352	33466	0.61	5.0E-75	AA573446.1	EST_HUMAN	RETROVIRUS-RELATED POL POLYPROTEIN (HUMAN);
7888	20352	33467	0.61	5.0E-75	AA573446.1	EST_HUMAN	nk98a03.at NCI_CGAP_C03 Homo sapiens cDNA clone IMAGE:1028833 3'
8806	21498	34643	0.94	5.0E-75	BE272325.1	EST_HUMAN	nk98a03.at NCI_CGAP_C03 Homo sapiens cDNA clone IMAGE:1028833 3'
9016	21705	34855	0.6	5.0E-75	AA132611.1	EST_HUMAN	601128088F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:2889865 5'
9093	21782	34946	0.78	5.0E-75	BE861635.1	EST_HUMAN	2017e08.r1 Strategene codon (#837204) Homo sapiens cDNA clone IMAGE:587174 5'
9093	21782	34947	0.78	5.0E-75	BE861635.1	EST_HUMAN	601346909F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3687458 5'
9273	22027	35197	1.53	5.0E-75	BF890254.1	EST_HUMAN	601346909F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3687458 5'
10134	22782	35993	2.39	5.0E-75	AJ638623.1	EST_HUMAN	602186610T1 NIH_MGC_49 Homo sapiens cDNA clone IMAGE:4298738 3'
110	12831	25588	2.16	4.0E-75	BE081333.1	EST_HUMAN	t331c12.x1 NCI_CGAP_G08 Homo sapiens cDNA clone IMAGE:2242380 3' similar to TR:P97361 P97361
446	13232		1.02	4.0E-75	N36757.1	EST_HUMAN	HYPOTHETICAL 20.1 KD PROTEIN;
1759	14501	27202	1.5	4.0E-75	AW897230.1	EST_HUMAN	QV1-BT0632-210200-079-602 BT0632 Homo sapiens cDNA
2853	15621	28266	4.89	4.0E-75	BE409464.1	EST_HUMAN	yx90h08.r1 Soares melanocyte 2NblHM Homo sapiens cDNA clone IMAGE:288055 5'
3492	16248	28902	0.94	4.0E-75	8922837	NT	CMO-NIN0057-150400-336-e11 NIN0057 Homo sapiens cDNA
5442	18241	31128	0.56	4.0E-75	11417946	NT	601303866F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3638344 5'
5442	18241	31128	0.56	4.0E-75	11417946	NT	Homo sapiens hypothetical protein FLJ10747 (FLJ10747), mRNA
6178	18953	31926	5.78	4.0E-75	5579457	NT	Homo sapiens NIPSNAP, C. elegans, homolog 1 (NIPSNAP1), mRNA
6861	19421	32436	2.26	4.0E-75	11417946	NT	Homo sapiens NIPSNAP, C. elegans, homolog 1 (NIPSNAP1), mRNA
6861	19421	32437	2.26	4.0E-75	11417946	NT	Homo sapiens NIPSNAP, C. elegans, homolog 1 (NIPSNAP1), mRNA
10584	23279	36517	18.12	4.0E-75	7689505	NT	Homo sapiens NIPSNAP, C. elegans, homolog 1 (NIPSNAP1), mRNA
982	13747	28409	3.72	3.0E-75	AF157623.1	NT	Homo sapiens myosin, heavy polypeptide 1, skeletal muscle, adult (MYH1), mRNA
983	13747	28409	2.41	3.0E-75	AF157623.1	NT	Homo sapiens HTRA serine protease (PRSS11) gene, complete cds
1828	14597	27470	2.76	3.0E-75	AB011153.1	NT	Homo sapiens HTRA serine protease (PRSS11) gene, complete cds
2105	14836	27570	1.11	3.0E-75	4507334	NT	Homo sapiens mRNA for KIAA0581 protein, partial cds
2422	15143	27870	5.86	3.0E-75	4759153	NT	Homo sapiens synaptobrevin 1 (SYNJ1), mRNA
							Homo sapiens synaptosomal-associated protein, 28kD (SNAP29) mRNA

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3021	15787	28434	0.97	3.0E-75	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
3184	15947	28597	1.32	3.0E-75	AB011153.1	NT	Homo sapiens mRNA for KIAA0581 protein, partial cds
3345	16104	28757	0.75	3.0E-75	M72363.1	NT	Human calcium-dependent phospholipid-binding protein (PLA2) mRNA, complete cds
3345	16104	28758	0.76	3.0E-75	M72363.1	NT	Human calcium-dependent phospholipid-binding protein (PLA2) mRNA, complete cds
4147	16889	28521	3.27	3.0E-75	D97675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
4404	17141	29769	0.73	3.0E-75	7682421	NT	Homo sapiens KIAA0871 protein (KIAA0871), mRNA
5171	17980	30493	0.83	3.0E-75	11420956	NT	Homo sapiens adaptor-related protein complex 1, sigma 2 subunit (AP1S2), mRNA
5171	17980	30494	0.83	3.0E-75	11420956	NT	Homo sapiens adaptor-related protein complex 1, sigma 2 subunit (AP1S2), mRNA
6671	19588	32623	1.88	3.0E-75	11526319	NT	Homo sapiens HIR (histone cell cycle regulation defective, S. cerevisiae) homolog A (HIRA), mRNA
6671	19588	32624	1.88	3.0E-75	11526319	NT	Homo sapiens HIR (histone cell cycle regulation defective, S. cerevisiae) homolog A (HIRA), mRNA
7035	19727	32783	4.56	3.0E-75	7682209	NT	Homo sapiens KIAA0623 gene product (KIAA0623), mRNA
7035	19727	32784	4.56	3.0E-75	7682209	NT	Homo sapiens KIAA0623 gene product (KIAA0623), mRNA
7522	20193	33284	2.52	3.0E-75	4686632	NT	Homo sapiens Oncogene TIM (TIM) mRNA
7522	20193	33285	2.52	3.0E-75	4686632	NT	Homo sapiens Oncogene TIM (TIM) mRNA
8883	21574	34717	1.21	3.0E-75	11430804	NT	Homo sapiens snail 1 (drosophila homolog), zinc finger protein (SNAI1), mRNA
9577	22230	36414	0.77	3.0E-75	11436222	NT	Homo sapiens Drosophila Katch like protein (DKELCHL), mRNA
10440	23086	36314	2.28	3.0E-75	11436430	NT	Homo sapiens synuclein, alpha (non A4 component of amyloid precursor) (SNCA), mRNA
5587	18384		1.41	2.0E-75	AV734680.1	EST_HUMAN	AV734680 cDNA Homo sapiens cDNA clone IMAGE:1915898 3' similar to TR:Q69396 Q69396
8648	21340	34484	2.45	2.0E-75	AJ311783.1	EST_HUMAN	q991602.x1 NCL CGAP_K045 Homo sapiens cDNA clone IMAGE:1915898 3' similar to TR:Q69396 Q69396
2076	14808	27539	1.12	1.0E-75	4506328	NT	POL/ENV GENE;
2076	14808	27540	1.12	1.0E-75	4506328	NT	Homo sapiens protein tyrosine phosphatase, receptor-type, zeta polypeptide 1 (PTPRZ1) mRNA
2301	16026	27792	6.68	1.0E-75	AW168135.1	EST_HUMAN	XP00402.x1 NCL CGAP_U14 Homo sapiens cDNA clone IMAGE:2632707 3' similar to contains PTR7.1
2947	15713	28398	3.27	1.0E-75	X52221.1	NT	PTR7 repetitive element;
8313	21006		4.27	1.0E-75	AA399270.1	EST_HUMAN	H. sapiens ERCC2 gene, exons 1 & 2 (partial)
8328	21985	35167	3.75	1.0E-75	BF313645.1	EST_HUMAN	z67603.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:728485 3' similar to gb:M13932 40S
8328	21985	35168	3.75	1.0E-75	BF313645.1	EST_HUMAN	RIBOSOMAL PROTEIN S17 (HUMAN);
10797	23480		10.83	1.0E-75	AA684377.1	EST_HUMAN	601800284F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4126678 5'
11033	23704	36972	2.56	1.0E-75	AF223391.1	NT	601800284F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4126678 5'
							ac77508.s1 Strabegene lung (#637210) Homo sapiens cDNA clone IMAGE:868599 3'
							Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1180	2444	37785	1.38	1.0E-76	AA417112.1	EST_HUMAN	z04b03.r1 Scores_testis_NHT Homo sapiens cDNA clone IMAGE:730829 5'
12152	17912	30598	1.94	1.0E-75	BE894182.1	EST_HUMAN	601437130F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3822303 5'
43	12872	25493	1.24	9.0E-78	AI652848.1	EST_HUMAN	w30b10.x1 NCL_CGAP_GC8 Homo sapiens cDNA clone IMAGE:2307183 3' similar to TR:O75235 O75235 TRAP1;
43	12872	25494	1.24	9.0E-78	AI652848.1	EST_HUMAN	w30b10.x1 NCL_CGAP_GC8 Homo sapiens cDNA clone IMAGE:2307183 3' similar to TR:O75235 O75235 TRAP1;
9801	22452	35654	43.62	9.0E-78	M12337.1	NT	Human ferritin heavy subunit mRNA, complete cds
917	13684	26347	1.06	8.0E-78	4504374	NT	Homo sapiens H factor 1 (complement) (HF1) mRNA
917	13684	26348	1.06	8.0E-78	4504374	NT	Homo sapiens H factor 1 (complement) (HF1) mRNA
2910	15676	28325	1	8.0E-78	7706724	NT	Homo sapiens mediator (Sur2), mRNA
6070	18868	31825	6.36	8.0E-78	11421442	NT	Homo sapiens LIM domain kinase 1 (LIMK1), mRNA
7388	20097	33145	1.26	8.0E-78	11435215	NT	Homo sapiens serine/threonine kinase 2 (STK2), mRNA
7465	20139	33231	0.86	8.0E-78	11419212	NT	Homo sapiens mitochondrial carrier family protein (LOC55972), mRNA
8195	20889	34027	0.67	8.0E-78	11416961	NT	Homo sapiens AIM-1 protein (LOC51151), mRNA
8895	21885	34835	0.55	8.0E-76	AB040704.1	NT	Homo sapiens mRNA for KIAA1644 protein, partial cds
10277	22925	36137	1.35	8.0E-76	M13792.1	NT	Human adenosine deaminase (ADA) gene, complete cds
10564	23280	36497	4.81	8.0E-76	10442821	NT	Homo sapiens baculoviral IAP repeat-containing 8 (BIRC8), mRNA
12491	24849		2	8.0E-76	11417982	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
759	13531	26191	1.41	7.0E-76	6016062	NT	Homo sapiens dihydrolipoamide dehydrogenase (E3 component of pyruvate dehydrogenase complex, 2-oxo-glutarate complex, branched chain keto acid dehydrogenase complex) (DLD) mRNA
3288	16049	28697	2.97	7.0E-76	AF056400.1	NT	Homo sapiens cAMP-specific phosphodiesterase 8A (PDE8A) mRNA, partial cds
3294	18055	28704	7.55	7.0E-76	4505052	NT	Homo sapiens lymphocyte antigen 75 (LY75) mRNA, and translated products
3330	16090	28743	0.93	7.0E-76	4757915	NT	Homo sapiens core-binding factor, runt domain, alpha subunit 2; translocated to, 1; cyclin D-related (CBFA2T1) mRNA
4338	17077	29705	4.73	7.0E-76	4507184	NT	Homo sapiens sepiapterin reductase (7,8-dihydrobiopterin:NADP+ oxidoreductase) (SPR) mRNA
4338	17077	29706	4.73	7.0E-76	4507184	NT	Homo sapiens sepiapterin reductase (7,8-dihydrobiopterin:NADP+ oxidoreductase) (SPR) mRNA
1212	13962		31.63	6.0E-78	BE396283.1	EST_HUMAN	601312019F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3858757 5'
11442	23208	36440	3.76	6.0E-76	BE273201.1	EST_HUMAN	601142253F1 NIH_MGC_14 Homo sapiens cDNA clone IMAGE:3506029 5'
1936	14871	27385	4.83	5.0E-76	D63874.1	NT	Human mRNA for HMG-1, complete cds
1936	14871	27386	4.83	5.0E-76	D63874.1	NT	Human mRNA for HMG-1, complete cds
1936	14871	27387	4.83	5.0E-76	D63874.1	NT	Human mRNA for HMG-1, complete cds
5188	17998	30512	1.26	4.0E-76	BE783412.1	EST_HUMAN	601471725F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3874470 5'
9923	22571	35768	6.42	4.0E-76	D81625.1	EST_HUMAN	HUM178G01B Human fetal brain (Tfujitwara) Homo sapiens cDNA clone GEN-178G01 5'

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Table 4  
Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9923	22671	35769	6.42	4.0E-76	D81625.1	EST_HUMAN	HUM178G01B Human fetal brain (TFUJlwara) Homo sapiens cDNA clone GEN-178G01 5'
615	13393	26026	3.2	3.0E-76	BF516262.1	EST_HUMAN	UI-HBW1-anz-b-04-0-UI.s1 NCL CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3083862 3'
615	13393	26027	3.2	3.0E-76	BF516262.1	EST_HUMAN	UI-HBW1-anz-b-04-0-UI.s1 NCL CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3083862 3'
1594	14340	27029	3.28	3.0E-76	4503476	NT	Homo sapiens eukaryotic translation elongation factor 1 beta 2 (EEF1B2) mRNA
1594	14340	27030	3.26	3.0E-76	4503476	NT	Homo sapiens eukaryotic translation elongation factor 1 beta 2 (EEF1B2) mRNA
3422	16179	28828	4.96	3.0E-76	BF375689.1	EST_HUMAN	RC5-ST0300-180100-033-A03 ST0300 Homo sapiens cDNA
3422	16179	28829	4.96	3.0E-76	BF375689.1	EST_HUMAN	RC5-ST0300-180100-033-A03 ST0300 Homo sapiens cDNA
4058	16903	29434	1.07	3.0E-76	BE348983.1	EST_HUMAN	h167112.x1 NCL CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3151823 3' similar to TR:094888 094888
5158	17891	31706	2.07	3.0E-76	Z41314.1	EST_HUMAN	HSC2QD042 normalized infant brain cDNA Homo sapiens cDNA clone c-zqd04 3'
5846	16441	31354	1.09	3.0E-76	AA160611.1	EST_HUMAN	zo73c07.r1 Stratiogene pancreas (#637208) Homo sapiens cDNA clone IMAGE:592524 5' similar to
6275	19048	32025	9.57	3.0E-76	AF286598.1	NT	gbL32876 MIXED LINEAGE KINASE 1 (HUMAN);
8050	20744	33877	0.88	3.0E-76	N42671.1	EST_HUMAN	Homo sapiens angiotensin binding protein 1 mRNA, complete cds
9616	22269	35456	3.34	3.0E-76	AW298353.1	EST_HUMAN	Y20g10.r1 Soares melanocyte 2Nbt-HM Homo sapiens cDNA clone IMAGE:271842 5'
9641	22283	35486	0.98	3.0E-76	AA442309.1	EST_HUMAN	xs49h01.x1 NCL CGAP_Kd11 Homo sapiens cDNA clone IMAGE:2773009 3'
9841	22293	35487	0.98	3.0E-76	AA442309.1	EST_HUMAN	zo64d11.r1 Soares testis NHT Homo sapiens cDNA clone IMAGE:757481 5'
11876	25191	30812	1.93	3.0E-76	AW967984.1	EST_HUMAN	EST380058 MAGC resequences, MAGJ Homo sapiens cDNA
11979	25398	30802	4.88	3.0E-76	AW956455.1	EST_HUMAN	EST388525 MAGC resequences, MAGD Homo sapiens cDNA
275	13082	25725	1.59	2.0E-76	D84295.1	NT	Human mRNA for possible protein TPRDII, complete cds
333	13134	25768	4.39	2.0E-76	D84295.1	NT	Human mRNA for possible protein TPRDII, complete cds
333	13134	25769	4.39	2.0E-76	D84295.1	NT	Human mRNA for possible protein TPRDII, complete cds
448	13234		1.19	2.0E-76	4567862	NT	Homo sapiens immunoglobulin (CD79A) binding protein 1 (IGBP1) mRNA
578	13356	25964	1.08	2.0E-76	4503944	NT	Homo sapiens glucagon (GCG) mRNA
1008	13706	26430	1	2.0E-76	4759053	NT	Homo sapiens cAMP responsive element binding protein 1 (CREB1) mRNA
1328	14273	26960	1.91	2.0E-76	4504028	NT	Homo sapiens GM2 ganglioside activator protein (GM2A) mRNA
1526	14273	26961	1.91	2.0E-76	4504028	NT	Homo sapiens GM2 ganglioside activator protein (GM2A) mRNA
1921	14658	27368	0.91	2.0E-76	AA253954.1	EST_HUMAN	zs80h11.s1 Stratiogene schizo brain S11 Homo sapiens cDNA clone IMAGE:701925 3'
2846	15614	28261	3.34	2.0E-76	P23286	SWISSPROT	OLFATORY RECEPTOR-LIKE PROTEIN F5
3291	16052	28701	2.06	2.0E-76	AA445992.1	EST_HUMAN	zw64e02.s1 Soares testis NHT Homo sapiens cDNA clone IMAGE:780986 3' similar to SW:ITB5_HUMAN
3291	16052	28702	2.06	2.0E-76	AA445992.1	EST_HUMAN	zw64e02.s1 Soares testis NHT Homo sapiens cDNA clone IMAGE:780986 3' similar to SW:ITB6_HUMAN

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Table 4  
Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3469	16225	28878	0.97	2.0E-76	AI821149.1	EST_HUMAN	es83602.y5 Strategene lung (#637210) Homo sapiens cDNA clone IMAGE:869163 5' similar to TR:O14591
4114	13082	25728	1.23	2.0E-76	D84286.1	NT	O14591 SIMILARITY TO P22059 ;
4895	17822	30240	6.21	2.0E-76	AW879618.1	EST_HUMAN	Human mRNA for possible protein TPRDII, complete cds
5065	17774	30390	1.49	2.0E-76	5031660	NT	QV3-OT0028-220300-132-b11 OT0028 Homo sapiens cDNA
5228	18033		1.6	2.0E-76	AF127845.1	NT	Homo sapiens EGF-like repeats and discoidin I-like domains 3 (EDIL3), mRNA
5531	18329	31233	6.47	2.0E-76	AB026004.1	NT	Gorilla gorilla olfactory receptor (GGO18) gene, partial cds
7334	20016	33094	0.75	2.0E-76	11428908	NT	Homo sapiens mRNA for KIAA1081 protein, partial cds
7580	20230	33333	1.91	2.0E-76	11427410	NT	Homo sapiens A kinase (PRKA) anchor protein 10 (AKAP10), mRNA
10182	22830	36045	3.53	2.0E-76	11437211	NT	Homo sapiens TPCR88 protein (HSTPCR88P), mRNA
10839	23521	36763	3.58	2.0E-76	7549807	NT	Homo sapiens similar to ribosomal protein S28 (H. sapiens) (LOC83160), mRNA
4265	17008	29638	2.38	1.0E-76	D63874.1	NT	Homo sapiens HIRA interacting protein 4 (dina-like) (HIRIP4), mRNA
4265	17008	29639	2.38	1.0E-76	D63874.1	NT	Human mRNA for HMG-1, complete cds
5362	18164	30849	8.12	1.0E-76	BE796637.1	EST_HUMAN	Human mRNA for HMG-1, complete cds
6150	18927		0.72	1.0E-76	AA333207.1	EST_HUMAN	60159998F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3944302 5'
6825	19486	32508	4.53	9.0E-77	BE889525.1	EST_HUMAN	EST37301 Embryo, 8 week I Homo sapiens cDNA 5' end
12644	24941		1.4	9.0E-77	BE410354.1	EST_HUMAN	601512435F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3913737 5'
182	12994	25633	0.92	8.0E-77	R83144.1	EST_HUMAN	601302333F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3639753 5'
4486	17221	29849	1.09	8.0E-77	BF205181.1	EST_HUMAN	yp11h02.f1 Scores breast 3NblHBst Homo sapiens cDNA clone IMAGE:187155 5' similar to
5396	18168	30854	1.74	8.0E-77	4506230	NT	SP-ANKB_HUMAN Q01484 ANKYRIN, BRAIN VARIANT 1 ;
11360	24048	37351	1.91	8.0E-77	AA019770.1	EST_HUMAN	601866928F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4109503 5'
11360	24048	37352	1.91	8.0E-77	AA019770.1	EST_HUMAN	I Homo sapiens proteasome (prosome, macropain) 26S subunit, non-ATPase, 7 (Mov34 homolog) (PSMD7) mRNA
12620	24925	31008	4.02	8.0E-77	R00245.1	EST_HUMAN	z662e02.f1 Scores retina N2b-4HR Homo sapiens cDNA clone IMAGE:3635578 5'
1922	14659	27370	2.4	7.0E-77	AA625755.1	EST_HUMAN	z662e02.f1 Scores retina N2b-4HR Homo sapiens cDNA clone IMAGE:3635578 5'
2411	15132	27868	2.52	7.0E-77	4505944	NT	ye09f04.s1 Scores fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:123007 3' similar to contains
2411	15132	27869	2.52	7.0E-77	4505944	NT	MER10 repetitive element ;
256	13064	25703	8.53	6.0E-77	4504600	NT	z671g01.s1 Scores testis NHT Homo sapiens cDNA clone IMAGE:745392 3'
1534	14281	26969	3.22	6.0E-77	A1204066.1	EST_HUMAN	Homo sapiens polymerase (RNA) II (DNA directed) polypeptide E (25KD) (POLR2E) mRNA
1214	13984	26631	2.11	5.0E-77	AF041015.1	NT	Homo sapiens polymerase (RNA) II (DNA directed) polypeptide E (25KD) (POLR2E) mRNA
1339	14087	26763	1.77	5.0E-77	4557250	NT	Homo sapiens interferon (alpha, beta and omega) receptor 2 (IFNAR2) mRNA
2661	15400	28139	0.98	5.0E-77	AF162966.1	NT	qe77h12.x1 Scores fetal lung NblHL19W Homo sapiens cDNA clone IMAGE:1745063 3'
							7 Homo sapiens glucokinase (GCK) gene, exon 2
							Homo sapiens disintegrin and metalloprotease domain 10 (ADAM10) mRNA
							Homo sapiens taurine-like kinase 1 (TLK1) mRNA, complete cds



Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2767	15472	28214	0.89	5.0E-77	4503160	NT	Homo sapiens cullin 1 (CUL1) mRNA
3512	16288	28923	0.89	5.0E-77	8394518	NT	Homo sapiens ubiquitin specific protease 18 (USP18) mRNA
4655	17389	30022	2.47	5.0E-77	5031660	NT	Homo sapiens EGF-like repeats and discoidin I-like domains 3 (EDIL3) mRNA
4655	17389	30023	2.47	5.0E-77	5031660	NT	Homo sapiens EGF-like repeats and discoidin I-like domains 3 (EDIL3) mRNA
4884	17611	30231	2.96	5.0E-77	AL043953.1	EST_HUMAN	DKFZp434G1728.1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434G1728.5
6686	19603	32642	0.57	5.0E-77	M13975.1	NT	Homo sapiens protein kinase C beta-II type (PRKCB1) mRNA, complete cds
7730	20393	33508	0.59	5.0E-77	8023319	NT	Homo sapiens hypothetical protein FLJ20343 (FLJ20343), mRNA
8266	20960	34098	1.28	5.0E-77	11428849	NT	Homo sapiens 3-hydroxyisobutyryl-Coenzyme A hydrolase (HIBCH), mRNA
8266	20960	34100	1.28	5.0E-77	11428849	NT	Homo sapiens 3-hydroxyisobutyryl-Coenzyme A hydrolase (HIBCH), mRNA
9469	22078	35249	2.48	5.0E-77	11421928	NT	Homo sapiens sorting nexin 5 (SNX5), mRNA
9469	22078	35250	2.48	5.0E-77	11421928	NT	Homo sapiens sorting nexin 5 (SNX5), mRNA
10388	23034	36249	1.22	5.0E-77	AB002297.1	NT	Human mRNA for KIAA0239 gene, partial cds
10388	23034	36250	1.22	5.0E-77	AB002297.1	NT	Human mRNA for KIAA0239 gene, partial cds
11764	24384	37716	3.12	5.0E-77	U37194.1	NT	Human UNC-104- and KIF1A-related protein mRNA, partial cds
11764	24384	37717	3.12	5.0E-77	U37194.1	NT	Human UNC-104- and KIF1A-related protein mRNA, partial cds
1865	14701	27417	1.09	3.0E-77	5730038	NT	Homo sapiens SET domain and mariner transposase fusion gene (SETMAR) mRNA
1865	14701	27418	1.09	3.0E-77	5730038	NT	Homo sapiens SET domain and mariner transposase fusion gene (SETMAR) mRNA
10188	22836	36050	0.79	3.0E-77	H65167.1	EST_HUMAN	SP:S17447 S17447 PROBABLE LIGAND-BINDING PROTEIN RY2G5 - ;
10188	22836	36051	0.79	3.0E-77	H65167.1	EST_HUMAN	SP:S17447 S17447 PROBABLE LIGAND-BINDING PROTEIN RY2G5 - ;
10785	23468	36709	3.58	3.0E-77	BF359917.1	EST_HUMAN	PM3-AT0078-080800-005-g03 MT0078 Homo sapiens cDNA
1330	14079	28763	1.4	2.0E-77	AV764617.1	EST_HUMAN	AV764617 MDS Homo sapiens cDNA clone MDSBTF10.5
1412	14160	28844	1.91	2.0E-77	AW987712.1	EST_HUMAN	RC3-BN0053-170200-011-101 BN0053 Homo sapiens cDNA
2084	14816	27548	1.13	2.0E-77	L41825.1	NT	Homo sapiens CYP17 gene, 5' end
2086	14827	27660	5.23	2.0E-77	7706315	NT	Homo sapiens CGL-79 protein (LOC51634), mRNA
2802	15599	28053	1.92	2.0E-77	AB037836.1	NT	Homo sapiens mRNA for KIAA1415 protein, partial cds
2002	15599	28054	1.92	2.0E-77	AB037836.1	NT	Homo sapiens mRNA for KIAA1415 protein, partial cds
4012	16758	28386	1.96	2.0E-77	BE044316.1	EST_HUMAN	h043605.x1 Soares NFL_T_08C S1 Homo sapiens cDNA clone IMAGE:3040113 3' similar to SW:GAG2_HUMAN P10284 RETROVIRUS-RELATED GAG POLYPROTEIN ;
4379	17116	29749	0.74	2.0E-77	A013519.1	EST_HUMAN	W22902.x1 NCI_CGAP_Bm52 Homo sapiens cDNA clone IMAGE:2260496 3' similar to TR:O65245
4379	17116	29750	0.74	2.0E-77	A013519.1	EST_HUMAN	O65245 F21E10.7 PROTEIN ;
4379	17116	29750	0.74	2.0E-77	A013519.1	EST_HUMAN	W22902.x1 NCI_CGAP_Bm52 Homo sapiens cDNA clone IMAGE:2260496 3' similar to TR:O65245

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4557	17292		0.96	2.0E-77	4504088	NT	Homo sapiens glutamic-oxaloacetic transaminase 2, mitochondrial (aspartate aminotransferase 2) (GOT2), nuclear gene encoding mitochondrial protein, mRNA
4717	17449	30082	1.59	2.0E-77	AA83025.1	EST_HUMAN	ns68g12.s1 NCL_CGAP_P12 Homo sapiens cDNA clone IMAGE:1188838 similar to SW:RL28_HUMAN
5865	18652	31593	1.9	2.0E-77	BE28940.1	EST_HUMAN	P-47914 60S RIBOSOMAL PROTEIN L26. [1]: contains element MSR1 repetitive element;
6080	18859	31826	1.73	2.0E-77	BE787143.1	EST_HUMAN	601110852F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3028436 5'
7074	19765	32829	15.45	2.0E-77	A1833003.1	EST_HUMAN	601478802F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3878505 5'
8427	21120	34259	0.82	2.0E-77	A1832707.1	EST_HUMAN	at74a08.x1 Barstead colon HPLRB7 Homo sapiens cDNA clone IMAGE:2377720 3' similar to TR:Q13311
9428	22106	35280	5.05	2.0E-77	U50321.1	NT	Q13311 TAX1-BINDING PROTEIN TXBP161. [1];
9428	22106	35281	5.06	2.0E-77	U50321.1	NT	qy70cd09.x1 NCL_CGAP_Bin25 Homo sapiens cDNA clone IMAGE:2017360 3' similar to WP:F29D11.1
9895	22545	36738	0.47	2.0E-77	BF310349.1	EST_HUMAN	CE05765 LOW DENSITY LIPID RECEPTOR-RELATED PROTEIN;
9895	22545	36739	0.47	2.0E-77	BF310349.1	EST_HUMAN	Human protein kinase C substrate 80K-H (PRKCSH) gene, exon 7
42	12870	25489	1.03	1.0E-77	AB033102.1	NT	Human protein kinase C substrate 80K-H (PRKCSH) gene, exon 7
42	12870	25490	1.03	1.0E-77	AB033102.1	NT	601886183F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4124541 5'
206	13074	25714	7.19	1.0E-77	4502166	NT	601886183F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4124541 5'
288	13074	25715	7.19	1.0E-77	4502166	NT	Homo sapiens mRNA for KIAA1276 protein, partial cds
855	15554	26296	17.31	1.0E-77	4502166	NT	Homo sapiens mRNA for KIAA1276 protein, partial cds
855	15554	26297	17.31	1.0E-77	4502166	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
1912	14649	27360	0.9	1.0E-77	AW058119.1	EST_HUMAN	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
2445	15164	27902	1.32	1.0E-77	AB020024.1	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
3040	16806	28451	1.72	1.0E-77	4503300	NT	Homo sapiens mRNA for KIAA1101 protein, complete cds
4320	17069	29684	3.37	1.0E-77	7706296	NT	Homo sapiens 2,4-dienoyl CoA reductase 1, mitochondrial (DECR1), mRNA
4488	17223	29851	18.41	1.0E-77	AJ229041.1	NT	Homo sapiens CGI-80 protein (LOC51628), mRNA
4803	17338	29867	2.29	1.0E-77	6552322	NT	Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22; segment 1/3
5010	17732	30337	1	1.0E-77	7661849	NT	Homo sapiens breast cancer 1, early onset (BRCA1), transcript variant BRCA1-exon4, mRNA
5010	17732	30338	1	1.0E-77	7661849	NT	Homo sapiens KIAA0005 gene product (KIAA0005), mRNA
5839	19627	31561	2.45	1.0E-77	AF086944.1	NT	Homo sapiens KIAA0005 gene product (KIAA0005), mRNA
							Homo sapiens dynactin 1 (DCTN1) gene, exons 27 and 28

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5839	18827	31582	2.45	1.0E-77	AF088944.1	NT	Homo sapiens dynactin 1 (DCTN1) gene, exons 27 and 28
5856	18738	31697	1.4	1.0E-77	M25844.1	NT	Human von Willebrand factor gene, exon 20
6358	19126	32120	0.82	1.0E-77	4885182	NT	Homo sapiens diaphanous (Draophila, homodog) 1 (DIAPH1), mRNA
6853	19435	32450	21.7	1.0E-77	5881412	NT	Homo sapiens elastin (supravalvular aortic stenosis, Williams-Buren syndrome) (ELN), mRNA
7564	20234	33338	1.05	1.0E-77	11420196	NT	Homo sapiens cullin 1 (CUL1), mRNA
7663	20327	33437	0.89	1.0E-77	X04571.1	NT	Human mRNA for kidney epidermal growth factor (EGF) precursor
9165	21835	36000	0.82	1.0E-77	X94354.1	NT	H. sapiens DNA for Cone cGMP-PDE gene
9165	21835	35001	0.82	1.0E-77	X94354.1	NT	H. sapiens DNA for Cone cGMP-PDE gene
10421	23067	36288	3.1	1.0E-77	AB029398.1	NT	Homo sapiens hu-GlcAT-P mRNA for glucuronyltransferase, complete cds
10421	23067	36289	3.1	1.0E-77	AB029398.1	NT	Homo sapiens hu-GlcAT-P mRNA for glucuronyltransferase, complete cds
10449	23095	36326	2.55	9.0E-78	AW753302.1	EST_HUMAN	RC3-CT0254-280989-011-b05 CT0254 Homo sapiens cDNA
6354	19124	32117	3.11	8.0E-78	AW947081.1	EST_HUMAN	RC2-ET0023-080500-012-e05 ET0023 Homo sapiens cDNA
6354	19124	32118	3.11	8.0E-78	AW947081.1	EST_HUMAN	RC2-ET0023-080500-012-e06 ET0023 Homo sapiens cDNA
84	12910	25548	1.87	6.0E-78	AU118789.1	EST_HUMAN	AU118789 HEMBA1 Homo sapiens cDNA clone HEMBA1004354 5'
84	12910	25549	1.87	6.0E-78	AU118789.1	EST_HUMAN	AU118789 HEMBA1 Homo sapiens cDNA clone HEMBA1004354 5'
8465	19232	25663	2.54	6.0E-78	11492710	NT	Homo sapiens GDNF family receptor alpha 1 (GFRA1), mRNA
212	13024	25663	0.72	5.0E-78	11422486	NT	Homo sapiens hypothetical protein FLJ11316 (FLJ11316), mRNA
2567	15281	28019	5.53	5.0E-78	AW673424.1	EST_HUMAN	bc54h03.y3 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2900405 5' similar to WP.Y4886A.6
3390	16139	28797	3.81	5.0E-78	M55586.1	NT	CE22121
5327	18130	30789	2.33	5.0E-78	AF038536.1	NT	Human collagenase type IV (CLG4) gene, exon 6
5488	18287	31183	11.12	5.0E-78	11416585	NT	Homo sapiens Best's macular dystrophy related protein mRNA, partial cds
7054	19745	32808	2.23	5.0E-78	AW963120.1	EST_HUMAN	Homo sapiens transforming growth factor, beta-induced, 68kd (TGFB1), mRNA
8981	21671	34821	6.78	5.0E-78	U60889.1	NT	EST T386100 IMAGE resequenced, MAGB Homo sapiens cDNA
8982	21672	34822	3.31	5.0E-78	BE960836.1	EST_HUMAN	Human lysosomal alpha-mannosidase (manB) gene, exon 7
1115	13872	28531	1.07	4.0E-78	AL043314.2	EST_HUMAN	601648061F1 NIH_MGC_62 Homo sapiens cDNA clone IMAGE:3931887 5'
1508	14254	28940	1.78	4.0E-78	AL355841.1	NT	DKFZp434N0323_1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434N0323 5'
1644	14390	27078	1.09	4.0E-78	AB850394.1	EST_HUMAN	Novel human gene mapping to chromosome 22
2316	15041	27779	2.08	4.0E-78	AF107405.1	NT	wr97b12.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2495615 3' similar to SW:WAP_PIG
4288	17027	29652	1.73	4.0E-78	7656878	NT	O46855 WHEY ACIDIC PROTEIN PRECURSOR ;
4722	17494	30088	2.61	4.0E-78	4505808	NT	Homo sapiens pre-mRNA splicing factor (SFRS3) mRNA, complete cds
4722	17454	30089	2.61	4.0E-78	4505808	NT	Homo sapiens syncytin (LOC30810), mRNA
5681	18474	31391	1.41	4.0E-78	11420732	NT	Homo sapiens phosphatidylinositol 4-kinase, catalytic, alpha polypeptide (PIK4CA) mRNA
							Homo sapiens phosphatidylinositol 4-kinase, catalytic, alpha polypeptide (PIK4CA) mRNA
							Homo sapiens SFRS protein kinase 2 (SRPK2), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7360	20069	33148	0.58	4.0E-78	4506736	NT	Homo sapiens ribosomal protein S6 kinase, 70kD, polypeptide 1 (RPS6KB1) mRNA
8752	21444	34591	2.86	4.0E-78	AF012872.1	NT	Homo sapiens phosphatidylinositol 4-kinase 230 (p14K230) mRNA, complete cds
8752	21444	34592	2.86	4.0E-78	AF012872.1	NT	Homo sapiens phosphatidylinositol 4-kinase 230 (p14K230) mRNA, complete cds
9288	22022	35192	0.6	4.0E-78	11417251	NT	Homo sapiens X-ray repair complementing defective repair in Chinese hamster cells 4 (XRCC4), mRNA
10342	22889	36208	1.98	4.0E-78	11560151	NT	Homo sapiens hypothetical C2H2 zinc finger protein FLJ22504 (FLJ22504), mRNA
10342	22889	36207	1.98	4.0E-78	11560151	NT	Homo sapiens hypothetical C2H2 zinc finger protein FLJ22504 (FLJ22504), mRNA
11398	24002	37305	5.18	4.0E-78	AF169148.1	NT	Homo sapiens e-CaBP1 (CABP1) mRNA, complete cds
11547	24148	37458	2.15	4.0E-78	X05944.1	NT	Human transforming growth factor-beta precursor gene exons 4-5 (and joined mature peptide)
12517	24866	31016	3.57	4.0E-78	AB011399.1	NT	Homo sapiens gene for AF-8, complete cds
157	12972	25610	1.39	3.0E-78	AF085901.1	NT	Homo sapiens eRF1 gene, complete cds
157	12972	25611	1.39	3.0E-78	AF085901.1	NT	Homo sapiens eRF1 gene, complete cds
3748	16499	29181	0.98	3.0E-78	AU140804.1	EST_HUMAN	AU140804 PLACES3 Homo sapiens cDNA clone PLACE3000373 5'
3798	16548	29181	0.72	3.0E-78	4507334	NT	Homo sapiens synaptobrevin 1 (SYNJ1), mRNA
4084	16548	29181	0.96	3.0E-78	4507334	NT	Homo sapiens synaptobrevin 1 (SYNJ1), mRNA
5094	17813	30430	0.93	3.0E-78	4506328	NT	Homo sapiens protein tyrosine phosphatase, receptor-type, zeta polypeptide 1 (PTPRZ1) mRNA
10186	22834	30632	5.14	3.0E-78	BE144758.1	EST_HUMAN	CMO-HT0180-041099-065-c07 HT0180 Homo sapiens cDNA
10902	23582	30632	1.97	3.0E-78	BE156318.1	EST_HUMAN	QV0-HT0367-150200-114-g09 HT0367 Homo sapiens cDNA
3119	15884		2.17	2.0E-78	U04490.1	NT	Homo sapiens type IV collagen alpha 5 chain (COL4A5) gene, exon 20
3895	16743		1.87	2.0E-78	AA311872.1	EST_HUMAN	EST182583 Jurkat T-cells VI Homo sapiens cDNA 5' end
7367	20047	33126	1.54	2.0E-78	AW402306.1	EST_HUMAN	UIHF-BKO-eaf-g-10-Q-UI.1 NIH_MGC_36 Homo sapiens cDNA clone IMAGE:3054139 5'
7367	20047	33127	1.54	2.0E-78	AW402306.1	EST_HUMAN	UIHF-BKO-eaf-g-10-Q-UI.1 NIH_MGC_36 Homo sapiens cDNA clone IMAGE:3054139 5'
7631	20297	33405	3.99	2.0E-78	BF689800.1	EST_HUMAN	602186529F1 NIH_MGC_49 Homo sapiens cDNA clone IMAGE:4298599 5'
7940	20635	33762	2.33	2.0E-78	AV714177.1	EST_HUMAN	AV714177 DC8 Homo sapiens cDNA clone DCBAWF09 5'
8351	21044	34180	1.4	2.0E-78	AI567509.1	EST_HUMAN	P2.1_16_B07.r tumor2 Homo sapiens cDNA 3'
8351	21044	34181	1.4	2.0E-78	AI567509.1	EST_HUMAN	P2.1_16_B07.r tumor2 Homo sapiens cDNA 3'
11017	23689	36852	3.27	2.0E-78	AI197837.1	EST_HUMAN	q150h05.x1 NC1 CGAP_Brn25 Homo sapiens cDNA clone IMAGE:1859601 3' similar to WPR90.1
11088	23738	37012	3.89	2.0E-78	N68951.1	EST_HUMAN	CE00325 PROTEIN KINASE;
4123	18965	29491	3.07	1.0E-78	4507098	NT	ze4812.s1 Soares fetal liver spleen INFLS Homo sapiens cDNA clone IMAGE:386823 3'
4123	18965	29492	3.07	1.0E-78	4507098	NT	Homo sapiens synaptosomal-associated protein, 25kD (SNAP25) mRNA
5222	18029	30655	2.93	1.0E-78	11417304	NT	Homo sapiens synaptosomal-associated protein, 25kD (SNAP25) mRNA
6857	17834	30670	0.76	1.0E-78	AV649698.1	EST_HUMAN	Homo sapiens GAP-like protein (LOC61306), mRNA
7736	20401	33517	0.55	1.0E-78	AU122163.1	EST_HUMAN	AV649699 GLC Homo sapiens cDNA clone GLOBMCO1 3'
							AU122163 MAMMA1 Homo sapiens cDNA clone MAMMA1001785 5'

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8050	20753		3.28	1.0E-78	U52373.1	NT	Human serine/threonine kinase MNB (mnb) mRNA, complete cds
12045	24585	31117	1.39	1.0E-78	11430480	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
12477	25244	30718	1.55	1.0E-78	AI650919.1	EST_HUMAN	w20h08.x1 NCL CGAP_Kd111 Homo sapiens cDNA clone IMAGE:2288815 3'
4650	17384	30016	4.05	9.0E-79	11525891	NT	Homo sapiens peptide YY (PYY), mRNA
4811	17542	30166	8.05	9.0E-79	BE000837.1	EST_HUMAN	RC2-BN0074-090300-014-c12 BN0074 Homo sapiens cDNA
5346	18149	30828	18.87	9.0E-79	AB028070.1	NT	Homo sapiens mRNA for activator of S phase Kinase, complete cds
6248	19022	31994	2.38	9.0E-79	5454145	NT	Homo sapiens ubiquitin-conjugating enzyme E2E 3 (homologous to yeast UBC4/5) (UBE2E3) mRNA
7251	25108		0.99	9.0E-79	11424427	NT	Homo sapiens hypothetical protein FLJ20345 (FLJ20345), mRNA
7473	20146	33239	0.79	9.0E-79	11421735	NT	Homo sapiens cAMP response element-binding protein CRE-BPa (H_GS165L15.1), mRNA
7473	20146	33240	0.79	9.0E-79	11421735	NT	Homo sapiens cAMP response element-binding protein CRE-BPa (H_GS165L15.1), mRNA
8244	20838	34074	0.49	9.0E-79	11417260	NT	Homo sapiens threonyl-tRNA synthetase (TARS), mRNA
8244	20838	34075	0.49	9.0E-79	11417260	NT	Homo sapiens threonyl-tRNA synthetase (TARS), mRNA
8961	21662	34802	5.1	9.0E-79	J02853.1	NT	Homo sapiens casein kinase II alpha subunit mRNA, complete cds
8961	21662	34803	5.1	9.0E-79	J02853.1	NT	Homo sapiens casein kinase II alpha subunit mRNA, complete cds
9280	22034	35206	0.58	9.0E-79	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
10263	22911	36121	0.82	9.0E-79	11438643	NT	Homo sapiens hypothetical protein FLJ20535 (FLJ20535), mRNA
10318	22965	36182	1.73	9.0E-79	AF062346.1	NT	Homo sapiens zinc finger protein 216 splice variant 1 (ZNF216) mRNA, complete cds
10318	22965	36183	1.73	9.0E-79	AF062346.1	NT	Homo sapiens zinc finger protein 216 splice variant 1 (ZNF216) mRNA, complete cds
11001	23674	36930	3.13	9.0E-79	AY008273.1	NT	Homo sapiens TRAF6-regulated IKK activator 1 beta Uev1A mRNA, complete cds
11497	24098	37410	3.55	9.0E-79	11423827	NT	Homo sapiens suppressor of white apicoid homolog 2 (SWAP2), mRNA
11497	24098	37411	3.55	9.0E-79	11423827	NT	Homo sapiens suppressor of white apicoid homolog 2 (SWAP2), mRNA
3725	18478	29115	0.91	8.0E-79	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
11906	17910	30598	1.82	8.0E-79	8667387	NT	Homo sapiens period (Drosophila) homolog 3 (PER3), mRNA
3247	18009	28880	28.39	7.0E-79	BE619848.1	EST_HUMAN	6014727/6011 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3875857 3'
11889	24488		4.32	6.0E-79	AA688629.1	EST_HUMAN	z94a04.a1 Soares fetal liver spleen INFLS_S1 Homo sapiens cDNA clone IMAGE:462558 3' similar to
11478	24079	37390	2.52	5.0E-79	AL163282.2	NT	TR-Q15408 Q15408 NEUTRAL PROTEASE LARGE SUBUNIT ;
3173	15936		1.49	4.0E-79	8022325	NT	Homo sapiens chromosome 21 segment HS21C082
305	13109	25749	1.28	3.0E-79	AF114488.1	NT	Homo sapiens hypothetical protein FLJ10283 (FLJ10283), mRNA
957	13722	26388	3.85	3.0E-79	AF232708.1	NT	Homo sapiens intercalin short isoform (ITSN) mRNA, complete cds
3095	15960	28501	1.51	3.0E-79	U09410.1	NT	Homo sapiens cell-line tsA201a cH chloride ion current inducer protein (Cln) gene, complete cds
5277	18082	30738	5.24	3.0E-79	AF110322.1	NT	Homo sapiens zinc finger protein ZNF131 mRNA, partial cds
5637	18432	31345	1.24	3.0E-79	AB020689.1	NT	Homo sapiens MSTP016 (MST016) mRNA, complete cds
							Homo sapiens mRNA for KIAA0892 protein, partial cds

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5662	19457	31371	0.93	3.0E-79	BE789470.1	EST_HUMAN	601482143F1 NIH_MGC_88 Homo sapiens cDNA clone IMAGE:3884554 5'
5662	19457	31372	0.93	3.0E-79	BE789470.1	EST_HUMAN	601482143F1 NIH_MGC_88 Homo sapiens cDNA clone IMAGE:3884554 5'
5682	19475	31392	3.56	3.0E-79	11426770	NT	Homo sapiens netrin 1 (NTN1), mRNA
5682	19475	31393	3.56	3.0E-79	11426770	NT	Homo sapiens netrin 1 (NTN1), mRNA
5646	19408	32422	0.67	3.0E-79	BE256803.1	EST_HUMAN	601112055F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3352885 5'
6060	19442	32457	3.35	3.0E-79	AB014820.1	NT	Homo sapiens mRNA for KIAA0620 protein, partial cds
6060	19442	32458	3.35	3.0E-79	AB014820.1	NT	Homo sapiens mRNA for KIAA0620 protein, partial cds
7726	20399	33503	0.76	3.0E-79	6012456	NT	Homo sapiens guanine nucleotide exchange factor for Rap1 (KIAA0277), mRNA
8064	20768	33987	1.61	3.0E-79	AF249273.1	NT	Homo sapiens tetrahydrocortisol repeat domain 3 (TTCC3), mRNA
9003	21970	35144	1.33	3.0E-79	10635036	NT	Homo sapiens Bcl-2-associated transcription factor short form mRNA, complete cds
10245	22893		1.24	3.0E-79	AV698116.1	EST_HUMAN	AV698116 GK6 Homo sapiens cDNA clone GKCAHE11 5'
10768	23452	36694	1.52	3.0E-79	AF249273.1	NT	Homo sapiens Bcl-2-associated transcription factor short form mRNA, complete cds
10768	23452	36695	1.52	3.0E-79	AF249273.1	NT	Homo sapiens Bcl-2-associated transcription factor short form mRNA, complete cds
261	13088		0.99	2.0E-79	H83126.1	EST_HUMAN	y-48103.x1 Source fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:208541 3'
619	13398	26033	1.8	2.0E-79	BC379928.1	EST_HUMAN	601159415F2 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:351107 5'
907	13674	26339	2.26	2.0E-79	4757841	NT	Homo sapiens BCL2-like 2 (BCL2L2) mRNA
1012	13772		2.09	2.0E-79	AI523747.1	EST_HUMAN	th18107.x1 NC1_CGAP_P28 Homo sapiens cDNA clone IMAGE:2118695 3'
1781	14522	27226	1.12	2.0E-79	7657024	NT	Homo sapiens Dickkopf gene 4 (DKK-4), mRNA
1781	14522	27227	1.12	2.0E-79	7657024	NT	Homo sapiens Dickkopf gene 4 (DKK-4), mRNA
2144	14874	27607	5.93	2.0E-79	4585963	NT	Homo sapiens phosphodiesterase 6A, cGMP-specific, rod, alpha (PDE6A), mRNA
2144	14874	27608	5.93	2.0E-79	4585963	NT	Homo sapiens phosphodiesterase 6A, cGMP-specific, rod, alpha (PDE6A), mRNA
2189	14918	27652	1.07	2.0E-79	AJ271408.1	NT	Homo sapiens mRNA for Fas-associated factor, FAF1 (Faf1 gene)
2721	15428	28106	1.09	2.0E-79	AB023154.1	NT	Homo sapiens mRNA for KIAA0637 protein, partial cds
3893	16943	29283	0.83	2.0E-79	AF170492.1	NT	Homo sapiens chloride channel ClO4 (ClO4) mRNA, complete cds
4144	16986	29517	1.09	2.0E-79	AJ271408.1	NT	Homo sapiens mRNA for Fas-associated factor, FAF1 (Faf1 gene)
5595	18382		1.22	2.0E-79	AA312223.1	EST_HUMAN	EST182826 Jurkat T-cells VI Homo sapiens cDNA 5' end similar to similar to C. elegans hypothetical protein, coemid B0303.15
5840	18435	31348	0.8	2.0E-79	11161709	NT	Homo sapiens X transporter protein 3 (XT3), mRNA
6149	18923	31896	1.14	2.0E-79	AB020637.1	NT	Homo sapiens mRNA for KIAA0830 protein, partial cds
6904	17941	30577	0.89	2.0E-79	AF263613.1	NT	Homo sapiens membrane-associated calcium-independent phospholipase A2 gamma mRNA, complete cds
7067	19758	32822	1.7	2.0E-79	7382479	NT	Homo sapiens Rho GTPase activating protein 6 (ARHGAP6), transcript variant 4, mRNA
7067	19758	32823	1.7	2.0E-79	7382479	NT	Homo sapiens Rho GTPase activating protein 6 (ARHGAP6), transcript variant 4, mRNA
7999	20694	33821	1.08	2.0E-79	4508442	NT	Homo sapiens retinoblastoma-like 1 (p107) (RBL1) mRNA

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8415	21108	34247	2.25	2.0E-79	11427428	NT	Homo sapiens hypothetical protein FLJ11006 (FLJ11006), mRNA
8684	21356	34503	0.58	2.0E-79	8923248	NT	Homo sapiens hypothetical protein FLJ20275 (FLJ20275), mRNA
8884	21358	34504	0.58	2.0E-79	8923248	NT	Homo sapiens hypothetical protein FLJ20275 (FLJ20275), mRNA
8902	21583	34734	1.65	2.0E-79	11432184	NT	Homo sapiens similar to ATPase, H <sup>+</sup> transporting, lysosomal (vacuolar proton pump) membrane sector associated protein M8-9 (H. sapiens) (LOC83861), mRNA
9082	22840	35850	1.44	2.0E-79	S72889.1	NT	H4(D10S170) putative cytoskeletal protein [human, thyroid, mRNA, 3011 nt]
9082	22840	35851	1.44	2.0E-79	S72889.1	NT	H4(D10S170) putative cytoskeletal protein [human, thyroid, mRNA, 3011 nt]
10698	23389	36627	12.34	2.0E-79	U07819.1	NT	Human contractin 1 precursor (CNTN1), mRNA, complete cds
10956	23632	36880	4.05	2.0E-79	BE084386.1	EST_HUMAN	RC4-BT0310-110300-015-F10 BT0310 Homo sapiens cDNA
10956	23632	36881	4.05	2.0E-79	BE084386.1	EST_HUMAN	RC4-BT0310-110300-015-F10 BT0310 Homo sapiens cDNA
11836	17908	30594	2.16	2.0E-79	7662357	NT	Homo sapiens KIAA0879 protein (KIAA0879), mRNA
12018	24548	31108	5.19	2.0E-79	AB020840.1	NT	Homo sapiens mRNA for KIAA0833 protein, partial cds
12238	24690	31075	2.80	2.0E-79	11418322	NT	Homo sapiens cadherin EGF LAG seven-pass G-type receptor 1 (CELSR1), mRNA
8482	25091		3.78	1.0E-79	BF363071.1	EST_HUMAN	MRO-NN0087-200600-017-b10 NN0087 Homo sapiens cDNA
8143	20837	33969	0.78	1.0E-78	BE394211.1	EST_HUMAN	60131151F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3632909 5'
11623	24220	37543	2.05	1.0E-79	BF087405.1	EST_HUMAN	QV2-HT0640-120900-368-a06 HT0640 Homo sapiens cDNA
12047	25333		1.8	1.0E-79	AI480115.1	EST_HUMAN	ar78a04.x1 Barabed colon HPLRB7 Homo sapiens cDNA clone IMAGE:2151438 3'
3143	15907	28551	2.35	9.0E-80	AA725848.1	EST_HUMAN	ai23e05.s1 Soares_testis_NHT Homo sapiens cDNA clone 1343848 3'
3143	15907	28552	2.35	9.0E-80	AA725848.1	EST_HUMAN	ai23e05.s1 Soares_testis_NHT Homo sapiens cDNA clone 1343848 3'
9912	22581	35757	1.14	9.0E-80	BE788903.1	EST_HUMAN	601581652F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3636061 5'
11245	23907	37199	8.68	9.0E-80	11433924	NT	Homo sapiens solute carrier family 7 (cationic amino acid transporter, y <sup>+</sup> system), member 8 (SLC7A8), mRNA
11245	23907	37200	8.68	9.0E-80	11433924	NT	Homo sapiens solute carrier family 7 (cationic amino acid transporter, y <sup>+</sup> system), member 8 (SLC7A8), mRNA
3588	16342		1.31	8.0E-80	U94387.1	NT	Homo sapiens Y chromosome spermatogenesis candidate protein (RBM) pseudogene mRNA, partial cds
7504	20175	33288	3.07	8.0E-80	11422847	NT	Homo sapiens KIAA0724 gene product (KIAA0724), mRNA
7504	20175	33289	3.07	8.0E-80	11422847	NT	Homo sapiens KIAA0724 gene product (KIAA0724), mRNA
9302	21989	35142	1.13	8.0E-80	6005921	NT	Homo sapiens triple functional domain (PTPRF interacting) (TRIO), mRNA
9302	21989	35143	1.13	8.0E-80	6005921	NT	Homo sapiens triple functional domain (PTPRF interacting) (TRIO), mRNA
880	13849	26318	1.12	6.0E-80	AI422197.1	EST_HUMAN	tf58a02.x1 NCI_QGAP_Bim23 Homo sapiens cDNA clone IMAGE:2103459 3' similar to SW:NUEM_HUMAN Q16795 NADH-UBIQUINONE OXIDOREDUCTASE 39 KD SUBUNIT PRECURSOR;
1638	14384	27071	2.22	6.0E-80	U94898.1	NT	Homo sapiens NRD convertase mRNA, complete cds

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4252	16993	29620	1.08	6.0E-80	AB032981.1	NT	Homo sapiens mRNA for KIAA1155 protein, partial cds
4252	16993	29621	1.08	6.0E-80	AB032981.1	NT	Homo sapiens mRNA for KIAA1155 protein, partial cds
5712	18505	31427	1.79	6.0E-80	11421462	NT	Homo sapiens malate dehydrogenase 2, NAD (mitochondrial) (MDH2), mRNA
5984	18786	31729	3.37	6.0E-80	AJ404468.1	NT	Homo sapiens mRNA for dynein heavy chain (DNAH9 gene)
6135	18913	31882	4.69	6.0E-80	11436736	NT	Homo sapiens tubby like protein 3 (TULP3), mRNA
6179	18956		1.17	6.0E-80	7962363	NT	Homo sapiens KIAA0941 protein (KIAA0941), mRNA
6230	19004	31980	0.96	6.0E-80	M19553.1	NT	Homo sapiens dytrophin (DMD) mRNA, complete cds
8723	21415	34558	3.22	6.0E-80	11528464	NT	Homo sapiens G protein-coupled receptor 51 (GPR51), mRNA
8723	21415	34559	3.22	6.0E-80	11528464	NT	Homo sapiens G protein-coupled receptor 51 (GPR51), mRNA
8917	21808	34761	1.61	6.0E-80	AL163301.2	NT	Homo sapiens chromosome 21 segment HS21C101
9269	21938	35113	0.83	6.0E-80	AF161495.1	NT	Homo sapiens HSPC146 mRNA, complete cds
9761	22412	35619	1.48	6.0E-80	U20211.1	NT	Human cone photoreceptor cGMP-phosphodiesterase alpha' subunit gene, exon 21
10861	23541	36788	2.83	6.0E-80	11427368	NT	Homo sapiens brefeldin A-inhibited guanine nucleotide-exchange protein 1 (BIG1), mRNA
11187	23662	37138	28.56	6.0E-80	AF226730.1	NT	Homo sapiens Cyf19 mRNA, complete cds
11702	24297	37623	1.59	6.0E-80	U76590.1	NT	Human peroxisome targeting signal 2 receptor (Pex7) mRNA, complete cds
11756	24347	37677	1.5	6.0E-80	AF102266.1	NT	Homo sapiens N-acetylglucosamine-phosphate mutase mRNA, complete cds
11802	24392	37725	2.26	6.0E-80	AB018280.1	NT	Homo sapiens mRNA for KIAA0717 protein, partial cds
11802	24392	37726	2.26	6.0E-80	AB018280.1	NT	Homo sapiens mRNA for KIAA0717 protein, partial cds
11906	13649	26318	1.88	6.0E-80	AI422197.1	EST_HUMAN	tf56d02.x1 NCL CGAP_Brn23 Homo sapiens cDNA clone IMAGE:2103459 3' similar to SW:NUEM_HUMAN Q16785 NADH-UBIQUINONE OXIDOREDUCTASE 39 KD SUBUNIT PRECURSOR;
12028	25217		2.42	6.0E-80	AF240796.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
12219	24879		5.78	6.0E-80	AB028900.1	NT	Homo sapiens GST gene for cerebroside sulfotransferase, exon 1, 2, 3, 4, 5
12707	25341		1.94	6.0E-80	AJ133127.1	NT	Homo sapiens mRNA for sodium-glucose cotransporter (SGLT2 gene)
12804	25051	30658	1.35	6.0E-80	AF240796.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
574	13554	25983	0.74	5.0E-80	4506228	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, non-ATPase, 3 (PSMD3) mRNA
815	13586	26263	1.97	6.0E-80	AF108830.1	NT	Homo sapiens serine-threonine protein kinase (MNBH) mRNA, complete cds
815	13586	26264	1.97	6.0E-80	AF108830.1	NT	Homo sapiens serine-threonine protein kinase (MNBH) mRNA, complete cds
1106	13820		2.39	5.0E-80	XG1647.1	NT	H. sapiens nco1 gene (exon 12)
1439	14186		2.26	5.0E-80	AL163283.2	NT	Homo sapiens chromosome 21 segment HS21C083
2361	15083	27821	1.99	6.0E-80	U89358.1	NT	Human K3mtb protein homolog mRNA, complete cds
2431	15152	27896	1.65	5.0E-80	AB037855.1	NT	Homo sapiens mRNA for KIAA1434 protein, partial cds



Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2797	15502	28242	1.67	5.0E-80	4504292	NT	Homo sapiens H3 histone family, member J (H3FJ) mRNA
4018	16794	29393	1.37	5.0E-80	AB019038.1	NT	Homo sapiens HMT-1 mRNA for beta-1,4 mannosyltransferase, complete cds
4018	16794	29394	1.37	5.0E-80	AB019038.1	NT	Homo sapiens HMT-1 mRNA for beta-1,4 mannosyltransferase, complete cds
4900	17827	30244	1.28	5.0E-80	AL163268.2	NT	Homo sapiens chromosome 21 segment HS21C068
8255	20949	34086	1.04	5.0E-80	8810283	NT	Mus musculus keratin complex 2, gene 6g (Krt2-6g), mRNA
9157	21888	35058	8.77	4.0E-80	F25915.1	EST_HUMAN	HSPD13155 HM3 Homo sapiens cDNA clone s4000048F03
211	13023		8.98	3.0E-80	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
4661	17395	30030	1.7	3.0E-80	BF085009.1	EST_HUMAN	PMO-GN0018-040900-002-E03 GN0018 Homo sapiens cDNA
4850	17580		3.77	3.0E-80	BE817465.1	EST_HUMAN	QV4-BN0263-040600-241-g10 BN0263 Homo sapiens cDNA
6730	18522	31443	2.88	3.0E-80	AI091875.1	EST_HUMAN	cc23a12.1 Soares NSF_F8_pW_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:1567054 3' similar to TR:O35790 O35790 PIG-L;
1780	14530	27238	5.08	2.0E-80	R35321.1	EST_HUMAN	yg65a08.11 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:38000 5'
1853	14591	27307	1.19	2.0E-80	AI444821.1	EST_HUMAN	RET487 subtracted retina cDNA library Homo sapiens cDNA clone RET487
2048	14782	27509	5.82	2.0E-80	AL043116.2	EST_HUMAN	DKFZp434D1323_j1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434D1323 5'
6708	19233	32667	0.83	2.0E-80	AA582852.1	EST_HUMAN	m80d01.s1 NCL_CGAP_C09 Homo sapiens cDNA clone IMAGE:1090177 3'
6813	19474	32408	1.71	2.0E-80	11421930	NT	Homo sapiens Golgi transport complex protein (90 kDa) (GTC90), mRNA
7151	19838	32908	1.46	2.0E-80	T75215.1	EST_HUMAN	yc86f12.1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:22851 5' similar to SP-K1CR_XENLA_P08802 KERATIN, TYPE I CYTOSKELETAL ENDO B;
9057	21746	34905	1.41	2.0E-80	AW984270.1	EST_HUMAN	EST376343 MAGE resequences, MAGE Homo sapiens cDNA
9688	22320	35518	1	2.0E-80	AJ007378.1	NT	Homo sapiens GGT gene, exon 6
10780	23463	36705	4.49	2.0E-80	AA303362.1	EST_HUMAN	z70f12.1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:72727 5' similar to TR:G191315
331	13132		2.25	1.0E-80	AL163303.2	NT	G191315 ANDROGEN-DEPENDENT EXPRESSED PROTEIN.;
782	13554	26215	1.37	1.0E-80	AF231920.1	NT	Homo sapiens chromosome 21 segment HS21C103
1947	14682		2.44	1.0E-80	A1732656.1	EST_HUMAN	Homo sapiens chromosome 21 unknown mRNA
5060	17779	30397	0.99	1.0E-80	4557610	NT	repetitive element;
5244	18050		6.43	1.0E-80	BE386615.1	EST_HUMAN	Homo sapiens gamma-aminobutyric acid (GABA) A receptor, gamma 2 (GABRG2) mRNA
5881	18667	31808	6.58	1.0E-80	L10347.1	NT	801274305F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3615433 5'
6406	19173	32174	1.36	1.0E-80	5174540	NT	Human pro-alpha1 type II collagen (COL2A1) gene exons 1-54, complete cds
7106	19794	32850	0.95	1.0E-80	AJ224172.1	NT	Homo sapiens melate dehydrogenase 2, NAD (mitochondrial) (MDH2), nuclear gene encoding mitochondrial protein, mRNA
7472	20145	33237	2.53	1.0E-80	A1948731.1	EST_HUMAN	Homo sapiens mRNA for lipophilin B
7472	20145	33238	2.53	1.0E-80	A1948731.1	EST_HUMAN	wq25c05.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2472298 3'
							wq25c05.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2472298 3'

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8130	20824	33080	2.84	1.0E-80	11421211	NT	Homo sapiens protein tyrosine phosphatase, receptor type, A (PTPRA), mRNA
8601	21293	34435	1.72	1.0E-80	11421211	NT	Homo sapiens protein tyrosine phosphatase, receptor type, A (PTPRA), mRNA
8601	21293	34436	1.72	1.0E-80	11421211	NT	Homo sapiens protein tyrosine phosphatase, receptor type, A (PTPRA), mRNA
9185	21855	35019	1.21	1.0E-80	AF246219.1	NT	Homo sapiens probable mannose binding C-type lectin DC-SIGNR mRNA, complete cds
9185	21855	35020	1.21	1.0E-80	AF246219.1	NT	Homo sapiens probable mannose binding C-type lectin DC-SIGNR mRNA, complete cds
10325	22972	36192	0.95	1.0E-80	D63479.2	NT	Homo sapiens mRNA for KIAA0145 protein, partial cds
10548	23244	38478	5.25	1.0E-80	11641276	NT	Homo sapiens similar to rat myomegalin (LOC84182), mRNA
10548	23244	38480	5.25	1.0E-80	11641278	NT	Homo sapiens similar to rat myomegalin (LOC84182), mRNA
12289	24719	31051	1.57	1.0E-80	11417901	NT	Homo sapiens meningioma (disrupted in balanced translocation) 1 (MN1), mRNA
12498	24853	31034	3.08	1.0E-80	AB020940.1	NT	Homo sapiens mRNA for KIAA0833 protein, partial cds
10583	23278	36515	1.46	8.0E-81	A1251752.1	EST_HUMAN	q190g05.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1854296 3'
10583	23278	36516	1.46	8.0E-81	A1251752.1	EST_HUMAN	q190g05.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1854296 3'
11102	23772	37046	8.46	8.0E-81	BE394525.1	EST_HUMAN	601310531F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3632070 5'
7162	19839	32909	3.58	7.0E-81	A1822115.1	EST_HUMAN	zsf1c08.x5 Soares_fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:288918 3'
4354	17092	29726	5.26	6.0E-81	BE259829.1	EST_HUMAN	601111970F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3352840 5'
4354	17092	29727	5.26	6.0E-81	BE259829.1	EST_HUMAN	601111970F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3352840 5'
6201	18009	30830	2.1	6.0E-81	4501848	NT	Homo sapiens ATP-binding cassette, sub-family A (ABCT), member 3 (ABCA3), mRNA
6201	18009	30831	2.1	6.0E-81	4501848	NT	Homo sapiens ATP-binding cassette, sub-family A (ABCT), member 3 (ABCA3), mRNA
7489	20161	33253	0.97	6.0E-81	AF038660.1	NT	Homo sapiens chromosome 1p33-p34 beta-1,4-galactosyltransferase mRNA, complete cds
9136	21824	34989	1.36	6.0E-81	AA360017.1	EST_HUMAN	EST60129 Fetal lung II Homo sapiens cDNA 5' end
11800	24390	37723	1.61	6.0E-81	BE396092.1	EST_HUMAN	601312522F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3658284 5'
12430	24803	31041	2.29	6.0E-81	BF679022.1	EST_HUMAN	602153686F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4294601 5'
12430	24803	31042	2.29	6.0E-81	BF679022.1	EST_HUMAN	602153686F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4294601 5'
2214	14942	27682	2.8	5.0E-81	BE268042.1	EST_HUMAN	601125505F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3345480 5'
8311	21005	34143	1.83	5.0E-81	AB007923.1	NT	Homo sapiens mRNA for KIAA0454 protein, partial cds
8311	21005	34144	1.83	5.0E-81	AB007923.1	NT	Homo sapiens mRNA for KIAA0454 protein, partial cds
9548	22201	35383	0.77	5.0E-81	M00316.1	NT	Human transforming growth factor-beta (tgf-beta) mRNA, complete cds
9548	22201	35384	0.77	5.0E-81	M00316.1	NT	Human transforming growth factor-beta (tgf-beta) mRNA, complete cds
11577	24176	37491	2.23	5.0E-81	9508634	NT	Homo sapiens hypothetical protein (FLJ11045), mRNA
11839	24423	37764	1.3	6.0E-81	11628341	NT	Homo sapiens armadillo repeat gene deletions in velocardiofacial syndrome (ARVCF), mRNA
686	13461	26109	2.03	4.0E-81	A1521435.1	EST_HUMAN	th60e12.x1 NCL_CGAP_Ov23 Homo sapiens cDNA clone IMAGE:2122702 3' similar to TR-Q85560 Q85560
1815	14555	27270	1.31	4.0E-81	AW778612.1	EST_HUMAN	hm98d02.x1 NCL_CGAP_Co14 Homo sapiens cDNA clone IMAGE:3035907 3' similar to SW:COG_BOVIN P53620 COATOMER GAMMA SUBUNIT;

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3168	15031	28580	3.58	4.0E-81	AB037768.1	NT	Homo sapiens mRNA for KIAA1345 protein, partial cds
3019	16372	28013	0.98	4.0E-81	AW004608.1	EST_HUMAN	hs90h03.x1 NCI_CGAP_Co3 Homo sapiens cDNA clone IMAGE:2505289 3' similar to TR:O43815 O43815 STRIATIN.;
4139	16881	29509	2.28	4.0E-81	AF263308.1	NT	Homo sapiens rab3 interacting protein variant 2 mRNA, partial cds
4139	16881	29510	2.28	4.0E-81	AF263308.1	NT	Homo sapiens rab3 interacting protein variant 2 mRNA, partial cds
4300	17088	28733	1.33	4.0E-81	8823209	NT	Homo sapiens hypothetical protein FLJ20220 (FLJ20220), mRNA
7177	19883	32034	1.11	4.0E-81	4757983	NT	Homo sapiens calcium channel, voltage-dependent, L type, alpha 2/delta subunit (CACNA2), mRNA
7299	19882	33058	0.57	4.0E-81	11420544	NT	Homo sapiens ets variant gene 1 (ETV1), mRNA
8185	20879	34016	3.59	4.0E-81	X05899.1	NT	Human mRNA for amyloid A4(751) protein
8443	21135	34271	3.43	4.0E-81	U20197.1	NT	Human cone photoreceptor cGMP-phosphodiesterase alpha' subunit gene, exons 2 and 3
8443	21135	34272	3.43	4.0E-81	U20197.1	NT	Human cone photoreceptor cGMP-phosphodiesterase alpha' subunit gene, exons 2 and 3
9126	21814	34980	6.1	4.0E-81	AB018001.1	NT	Homo sapiens mRNA for Death-associated protein kinase 2, complete cds
10001	22849	35861	1.53	4.0E-81	11425281	NT	Homo sapiens ligase I, DNA, ATP-dependent (LIG1), mRNA
10070	22718	35835	0.71	4.0E-81	11439085	NT	Homo sapiens acyl-Coenzyme A dehydrogenase family, member 8 (ACAD8), mRNA
10070	22718	35836	0.71	4.0E-81	11439085	NT	Homo sapiens acyl-Coenzyme A dehydrogenase family, member 8 (ACAD8), mRNA
11140	23807	37086	3.2	4.0E-81	4759085	NT	Homo sapiens vesicle trafficking protein sec22b (SEC22B), mRNA
11140	23807	37087	3.2	4.0E-81	4759085	NT	Homo sapiens vesicle trafficking protein sec22b (SEC22B), mRNA
11928	25280	30731	3.63	4.0E-81	11417982	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
11928	25280	30732	3.63	4.0E-81	11417982	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
12463	24831	31030	1.63	4.0E-81	11417871	NT	Homo sapiens beta-ureidopropionase (LOC51733), mRNA
12463	24831	31031	1.63	4.0E-81	11417871	NT	Homo sapiens beta-ureidopropionase (LOC51733), mRNA
12597	24911	31004	4.82	4.0E-81	11417974	NT	Homo sapiens transcobalamin II; macrocytic anemia (TCN2), mRNA
1244	13903	28658	12.36	3.0E-81	Y18000.1	NT	Homo sapiens NIF2 gene
1244	13983	28659	12.36	3.0E-81	Y18000.1	NT	Homo sapiens NIF2 gene
2371	15083	27832	1.23	3.0E-81	AF077188.1	NT	Homo sapiens cullin 4A (CUL4A) mRNA, complete cds
2889	15755	28400	5.83	3.0E-81	4506280	NT	Homo sapiens pleiotrophin (heparin binding growth factor 8, neurite growth-promoting factor 1) (PTN) mRNA
2889	15755	28401	5.83	3.0E-81	4506280	NT	Homo sapiens pleiotrophin (heparin binding growth factor 8, neurite growth-promoting factor 1) (PTN) mRNA
2837	15805	28264	2.97	2.0E-81	BE784636.1	EST_HUMAN	601474072F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3877121 5'
2837	15805	28265	2.97	2.0E-81	BE784636.1	EST_HUMAN	601474072F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3877121 5'
3755	16507	29144	0.71	2.0E-81	AW611542.1	EST_HUMAN	hg85c01.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2952384 3'
7857	20552	33678	0.8	2.0E-81	8823839	NT	Homo sapiens hypothetical protein (LOC55688), mRNA

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1402	14149	26829	1.13	1.0E-81	W26539.1	EST_HUMAN	3373 Human retina cDNA, randomly primed sublibrary Homo sapiens cDNA
3844	16397	28037	1.07	1.0E-81	AW980658.1	EST_HUMAN	EST372728 MAGIE resequences, MAGF Homo sapiens cDNA
4479	17214	29839	3.56	1.0E-81	AA040370.1	EST_HUMAN	z45r09.r1 Soares_pregnant_uterus_NIH/PU Homo sapiens cDNA clone IMAGE:488825 5' similar to
4800	17335	28984	5.99	1.0E-81	BE047988.1	EST_HUMAN	PIR:S52437 S52437 CDP-diacylglycerol synthase - fruit fly;
5157	17800	37795	4.69	1.0E-81	U87828.1	NT	tz45c04.y1 NCI_QGAP_Brm52 Homo sapiens cDNA clone IMAGE:2281528 5'
5269	18075	30704	4.1	1.0E-81	11432968	NT	Human aconitase hydratase (ACO2) gene, exon 3
5269	18076	30706	4.1	1.0E-81	11432968	NT	Homo sapiens polymerase (DNA directed), gamma (POLG), mRNA
5415	18214	30922	0.85	1.0E-81	AA255569.1	EST_HUMAN	Homo sapiens polymerase (DNA directed), gamma (POLG), mRNA
5568	18365	31273	3.47	1.0E-81	U82351.1	NT	Homo sapiens arm-repeat protein NPRAP/neurojuncin (CTNND2) mRNA, partial cds
5568	18365	31274	3.47	1.0E-81	U82351.1	NT	Homo sapiens arm-repeat protein NPRAP/neurojuncin (CTNND2) mRNA, partial cds
6054	18834	31796	1.81	1.0E-81	BF67494.1	EST_HUMAN	602137884F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4274535 5'
6453	19221	32218	0.59	1.0E-81	11420965	NT	Homo sapiens phosphodiesterase 1C, calmodulin-dependent (70kD) (PDE1C), mRNA
6453	19221	32219	0.59	1.0E-81	11420965	NT	Homo sapiens phosphodiesterase 1C, calmodulin-dependent (70kD) (PDE1C), mRNA
6639	19401	32416	0.87	1.0E-81	AJ133289.1	NT	Homo sapiens cavedin-1/-2 locus, Contig1, D7S522, genes CAV2 (exons 1, 2a, and 2b), CAV1 (exons 1 and 2)
7069	20333	33444	8.45	1.0E-81	11432968	NT	Homo sapiens polymerase (DNA directed), gamma (POLG), mRNA
9676	22328	35523	5.09	1.0E-81	BE958278.1	EST_HUMAN	601645051F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:3930228 5'
9676	22328	35524	5.09	1.0E-81	BE958278.1	EST_HUMAN	601645051F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:3930228 5'
9689	22519	35715	5.08	1.0E-81	BE584367.1	EST_HUMAN	601343180F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3685483 5'
10003	22651	35883	1.59	1.0E-81	AA630784.1	EST_HUMAN	ac14d08.a1 Stragene HeLa cell s3 937216 Homo sapiens cDNA clone IMAGE:858427 3' similar to SW:YB36_YEAST P38128 HYPOTHETICAL 60.5 KD PROTEIN IN RPS101-RPS13 INTERGENIC REGION.
10005	22653	35885	3.27	1.0E-81	BE744545.1	EST_HUMAN	601577339F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3838280 5'
10005	22653	35886	3.27	1.0E-81	BE744545.1	EST_HUMAN	601577339F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3838280 5'
10405	23051	36289	1.69	1.0E-81	AW897550.1	EST_HUMAN	CM3-NN00059-140400-147-rt2 NN00059 Homo sapiens cDNA
10860	23540	36787	2.9	1.0E-81	8923698	NT	Homo sapiens golgin-like protein (GLP), mRNA
11029	23700	36966	1.97	1.0E-81	AW844988.1	EST_HUMAN	MRO-CT0006-250598-019 CT0006 Homo sapiens cDNA
11029	23700	36967	1.97	1.0E-81	AW844988.1	EST_HUMAN	MRO-CT0006-250598-019 CT0006 Homo sapiens cDNA
11240	16987	29037	1.72	1.0E-81	AW980658.1	EST_HUMAN	EST372729 MAGIE resequences, MAGF Homo sapiens cDNA
11507	24108	37421	1.89	1.0E-81	BF204253.1	EST_HUMAN	601867714F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4110459 5'
12132	24622	31093	4.13	1.0E-81	11418138	NT	Homo sapiens perlecan (similar to adiponectin B mRNA editing protein) (DJ742C19.2), mRNA
12	12839	25452	3.6	8.0E-82	AF161406.1	NT	Homo sapiens HSPC288 mRNA, partial cds

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Table 4  
Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
104	12839	25462	2.45	8.0E-82	AF161406.1	NT	Homo sapiens HSPC288 mRNA, partial cds
257	13065	25704	1.1	8.0E-82	U08988.1	NT	Human CRFB4 gene, partial cds
795	13567	26227	2.83	8.0E-82	U08988.1	NT	Human CRFB4 gene, partial cds
867	13636	26306	0.84	8.0E-82	U08988.1	NT	Human CRFB4 gene, partial cds
1474	14221	26907	1.42	8.0E-82	AB037748.1	NT	Homo sapiens mRNA for KIAA1327 protein, partial cds
1654	14400	27089	1.43	8.0E-82	6715801	NT	Homo sapiens glutathione peroxidase 5 (epididymal androgen-related protein) (GPX5), transcript variant 2, mRNA
4219	16660	29585	0.9	8.0E-82	8923432	NT	Homo sapiens hypothetical protein FLJ20461 (FLJ20461), mRNA
1433	14180	29585	1.7	7.0E-82	BF035327.1	EST_HUMAN	601458531F1 NIH_MGC_80 Homo sapiens cDNA clone IMAGE:3862086 5'
2768	15474	28216	1.2	7.0E-82	AU144050.1	EST_HUMAN	AU144050 HEMBA1 Homo sapiens cDNA clone HEMBA1000762 3'
11759	24350	37692	1.71	7.0E-82	AA663747.1	EST_HUMAN	aa663747.1 Stratagene schizo brain S11 Homo sapiens cDNA clone IMAGE:968342 3'
4104	16847	29473	0.71	5.0E-82	AA515512.1	EST_HUMAN	nf89e11.s1 NCI CGAP_C63 Homo sapiens cDNA clone IMAGE:925196 3'
1666	14412	27103	49.82	4.0E-82	AF081484.1	NT	Homo sapiens alpha-tubulin isoform 1 mRNA, complete cds
5409	18208	30915	0.8	4.0E-82	BF351891.1	EST_HUMAN	QV2-HT0540-120900-362408 HT0540 Homo sapiens cDNA
5409	18208	30916	0.8	4.0E-82	BF351891.1	EST_HUMAN	QV2-HT0540-120900-362408 HT0540 Homo sapiens cDNA
5671	18466	31381	0.65	4.0E-82	M28833.1	NT	Human von Willebrand factor gene, exon 9
11718	24310	37633	11.61	4.0E-82	A1837300.1	EST_HUMAN	wp75609.x1 NCI CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2467624 3' similar to TR:O75276
12374	24773		5.05	4.0E-82	AF029701.2	NT	O75276 PKD1 ; Homo sapiens presenilin-1 gene, exons 1 and 2
271	13079	26721	21.65	3.0E-82	4502168	NT	Homo sapiens amyloid beta (A4) precursor protein (precursor disease) (APP), mRNA
687	13462	26110	3.11	3.0E-82	BE005705.1	EST_HUMAN	RC2-BN0120-010400-013402 BN0120 Homo sapiens cDNA
770	13542	26203	5.7	3.0E-82	5174702	NT	Homo sapiens transforming growth factor beta-activated kinase-binding protein 1 (TAB1), mRNA
850	13620	26280	10.65	3.0E-82	4502168	NT	Homo sapiens amyloid beta (A4) precursor protein (precursor disease) (APP), mRNA
1039	13799		18.58	3.0E-82	AA725948.1	EST_HUMAN	aa725948.1 Soares testis_NHT Homo sapiens cDNA clone 1343648 3'
1333	14082	26758	1.25	3.0E-82	AW875073.1	EST_HUMAN	RC8-PT0001-190100-021-B02 PT0001 Homo sapiens cDNA
1460	14197	26881	3.44	3.0E-82	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
1884	14631	27341	1.91	3.0E-82	BE513232.1	EST_HUMAN	RC1-BN0005-260700-018-g04 BN0005 Homo sapiens cDNA
2000	14736	27469	1.63	3.0E-82	4501922	NT	Homo sapiens adenylyl cyclase activating polypeptide 1 (pituitary) receptor type 1 (ADCYAP-1R1) mRNA
3268	16028		2.52	3.0E-82	6453811	NT	Homo sapiens neurotrophic tyrosine kinase, receptor, type 2 (NTRK2) mRNA

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4864	17593	30216	0.98	3.0E-82	AA135979.1	EST_HUMAN	zr83b04.r1 Strabagene lung carcinoma 937218 Homo sapiens cDNA clone IMAGE:585711 5' similar to SW:PAGT_BOVIN_Q07537 POLYPEPTIDE N-ACETYL GALACTOSAMINYL TRANSFERASE ;
8052	20748	33878	3.14	3.0E-82	11425208	NT	Homo sapiens ankryrin-like with transmembrane domains 1 (ANKTM1), mRNA
8454	21148	34287	0.88	3.0E-82	11432889	NT	Homo sapiens contactin 6 (CNTN6), mRNA
8454	21146	34288	0.88	3.0E-82	11432889	NT	Homo sapiens contactin 6 (CNTN6), mRNA
9724	22375	35575	3.23	3.0E-82	AB028000.1	NT	Homo sapiens mRNA for KIAA1077 protein, partial cds
9724	22375	35576	3.23	3.0E-82	AB028000.1	NT	Homo sapiens mRNA for KIAA1077 protein, partial cds
563	13363	25990	2.85	2.0E-82	AB023216.1	NT	Homo sapiens mRNA for KIAA0999 protein, partial cds
583	13363	25991	2.55	2.0E-82	AB023216.1	NT	Homo sapiens mRNA for KIAA0999 protein, partial cds
1681	14426	27121	1.21	2.0E-82	AL046390.1	EST_HUMAN	DKFZp434M117.1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434M117 5'
3827	16578	29210	1.25	2.0E-82	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
4208	16949	29575	1.17	2.0E-82	4504116	NT	Homo sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1) mRNA
4521	17258	29890	1.01	2.0E-82	AB023019.1	NT	Homo sapiens mRNA for KIAA1098 protein, partial cds
4521	17258	29891	1.01	2.0E-82	AB023019.1	NT	Homo sapiens mRNA for KIAA1098 protein, partial cds
4816	17547	30172	2.85	2.0E-82	AF045555.1	NT	Homo sapiens wbscr1 (WBSGR1) and wbscr5 (WBSGR5) genes, complete cds, alternatively spliced and replication factor C subunit 2 (RFC2) gene, complete cds
5021	17742	30352	1.46	2.0E-82	4507580	NT	Homo sapiens tumor necrosis factor receptor superfamily, member 5 (TNFRSF5) mRNA
5021	17742	30353	1.46	2.0E-82	4507580	NT	Homo sapiens tumor necrosis factor receptor superfamily, member 5 (TNFRSF5) mRNA
5384	18184	30874	5.65	2.0E-82	AB018270.1	NT	Homo sapiens mRNA for KIAA0727 protein, partial cds
6082	19861	31827	4.73	2.0E-82	AF234882.1	NT	Homo sapiens FAM4A1 splice variant a (FAM4A1) mRNA, complete cds
7651	25426		0.91	2.0E-82	AI476428.1	EST_HUMAN	hm27g05.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2157272 3'
7705	20369	33482	0.85	2.0E-82	8923130	NT	Homo sapiens hypothetical protein FLJ20128 (FLJ20128), mRNA
8204	20898	34035	2.16	2.0E-82	11321570	NT	Homo sapiens slit (Drosophila) homolog 3 (SLIT3), mRNA
8508	21260	34397	0.45	2.0E-82	7657340	NT	Homo sapiens microchidia (mouse) homolog (MORC), mRNA
8568	21260	34398	0.45	2.0E-82	7657340	NT	Homo sapiens microchidia (mouse) homolog (MORC), mRNA
10009	22657	35870	1.84	2.0E-82	Y08032.1	NT	Human endogenous retrovirus-K, LTR U5 and gag gene
10009	22657	35871	1.84	2.0E-82	Y08032.1	NT	Human endogenous retrovirus-K, LTR U5 and gag gene
11237	23900	37187	1.27	2.0E-82	11417191	NT	Homo sapiens leucyl/cystinyl aminopeptidase (LNPEP), mRNA
11237	23900	37188	1.27	2.0E-82	11417191	NT	Homo sapiens leucyl/cystinyl aminopeptidase (LNPEP), mRNA
11279	23940	37233	4.45	2.0E-82	U80736.1	NT	Homo sapiens CAGF9 mRNA, partial cds
11279	23940	37234	4.45	2.0E-82	U80736.1	NT	Homo sapiens CAGF9 mRNA, partial cds
11750	24341	37670	1.91	2.0E-82	5031860	NT	Homo sapiens EGF-like repeats and discoidin-like domains 3 (EDIL3), mRNA
11957	24508		1.58	2.0E-82	N94950.1	EST_HUMAN	zb31d10.s1 Soares_parathyroid_tumor_NbHPA Homo sapiens cDNA clone IMAGE:305203 3'

Table 4  
Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12485	24844		3.47	2.0E-82	AA011278.1	EST_HUMAN	201g09.r1 Soares_fetal_liver_spleen_INFLS_S1 Homo sapiens cDNA clone IMAGE:429568 5'
12775	26029		1.95	2.0E-82	11418097	NT	Homo sapiens SRY (sex determining region Y)-box 10 (SOX10), mRNA
578	13358	25986	1.14	1.0E-82	11545921	NT	Homo sapiens melanoma differentiation associated protein-5 (MDA5), mRNA
1186	13938		0.77	1.0E-82	BE885106.1	EST_HUMAN	601510859F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3912207 5'
1263	14012	28679	3.1	1.0E-82	BE064388.1	EST_HUMAN	RC4-BT0310-110300-015-f10 BT0310 Homo sapiens cDNA
1264	14013	28680	1.28	1.0E-82	AB011110.2	NT	Homo sapiens mRNA for KIAA0538 protein, partial cds
8941	21533	34678	1.13	1.0E-82	AB037838.1	NT	Homo sapiens mRNA for KIAA1417 protein, partial cds
9553	22208	35390	0.59	1.0E-82	AB014562.1	NT	Homo sapiens mRNA for KIAA0682 protein, partial cds
10145	22793		1.17	1.0E-82	BF516038.1	EST_HUMAN	U1-HBW1-aae-f03-0-L1.s1 NCI_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3084053 3'
10946	23337	36576	2.34	1.0E-82	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C008
8615	21307	34449	4.51	9.0E-83	BF672220.1	EST_HUMAN	602150403F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4291561 5'
10174	22822	36039	0.53	9.0E-83	BE25347.1	EST_HUMAN	601117160F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3357734 5'
1392	14138	28816	3.33	8.0E-83	BE383973.1	EST_HUMAN	601273346F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3814362 5'
1676	15523	27115	5.63	8.0E-83	N66951.1	EST_HUMAN	2a48f12.s1 Soares fetal liver spleen INFLS Homo sapiens cDNA clone IMAGE:285823 3'
1335	14084	28759	0.97	7.0E-83	AW385528.1	EST_HUMAN	QV4-LT0018-271280-068-111 LT0018 Homo sapiens cDNA
2868	15635		1.88	7.0E-83	AA584655.1	EST_HUMAN	nc12h01.s1 NCI_CGAP_Pher1 Homo sapiens cDNA clone IMAGE:1100497 3' similar to contains Alu repetitive element
4765	17497		6.68	7.0E-83	BF221813.1	EST_HUMAN	7p37a07.x1 NCI_CGAP_Py28 Homo sapiens cDNA clone IMAGE:3847893 3' similar to TR:Q9Y316 Q9Y316
5960	18742	31702	0.58	7.0E-83	11426657	NT	DJ207H1.1 ;
11717	24311	37634	1.4	7.0E-83	5729753	NT	Homo sapiens KIAA0100 gene product (KIAA0100), mRNA
11717	24311	37635	1.4	7.0E-83	5729763	NT	Homo sapiens transcription factor CA150 (CA150) mRNA
394	13179	25828	1.98	6.0E-83	M33320.1	NT	Homo sapiens transcription factor CA150 (CA150) mRNA
1779	14520	27224	1.5	6.0E-83	AW573088.1	EST_HUMAN	Human platelet Glycoprotein IIb (GPIIb) gene, exons 2-29
3017	15783	28432	0.71	6.0E-83	AW818405.1	EST_HUMAN	h31h03.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2833525 3' similar to SW:YBEB_HAEIN P44471 HYPOTHETICAL PROTEIN H10034 ;
3046	15812		1.08	6.0E-83	AF231919.1	NT	QV4-ST0234-181199-037-05 ST0234 Homo sapiens cDNA
5211	18019	30841	2.02	6.0E-83	4507988	NT	Homo sapiens chromosome 21 unknown mRNA
5633	18716	31874	1.52	6.0E-83	AJ010770.1	NT	Homo sapiens VAMP (vesicle-associated membrane protein)-associated protein A (33kD) (VAPA) mRNA, end translated products
7401	20079	33160	2.27	6.0E-83	11422024	NT	Homo sapiens hyperin gene, exons 1-50
8575	22228	35413	2.85	6.0E-83	4505314	NT	Homo sapiens met proto-oncogene (hepatocyte growth factor receptor) (MET), mRNA
9089	22321	35517	2.34	6.0E-83	11430847	NT	Homo sapiens myomesin (M-protein) 2 (168kD) (MYOM2), mRNA
9089	22321	35518	2.34	6.0E-83	11430847	NT	Homo sapiens pre-mRNA splicing factor similar to S. cerevisiae Prip18 (PRP18), mRNA
9089	22321	35518	2.34	6.0E-83	11430847	NT	Homo sapiens pre-mRNA splicing factor similar to S. cerevisiae Prip18 (PRP18), mRNA

Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11517	24117		2.53	6.0E-83	AA486105.1	EST_HUMAN	ab14e10.s1 Strategene lung (#837210) Homo sapiens cDNA clone IMAGE:840810 3' similar to contains THR12 THR repetitive element;
11808	24472		4.27	6.0E-83	AF240788.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
925	13692		2.03	5.0E-83	U17883.1	NT	Human succinate dehydrogenase iron-protein subunit (sdhB) gene, exon 5
2043	15526		1.55	5.0E-83	AF006305.1	NT	Homo sapiens 26S proteasome regulatory subunit (SUG2) mRNA, complete cds
3629	16382	29022	1.18	5.0E-83	AL133207.2	NT	Novel human gene mapping to chromosome X
3888	16836	29275	0.77	5.0E-83	4885190	NT	Homo sapiens deoxyribonuclease I (DNASE1), mRNA
5020	17741	30350	11.53	5.0E-83	4557013	NT	Homo sapiens catalase (CAT) mRNA
5020	17741	30351	11.53	5.0E-83	4557013	NT	Homo sapiens catalase (CAT) mRNA
5093	17812	30428	1.07	6.0E-83	5031690	NT	Homo sapiens EGF-like repeats and discoidin-like domains 3 (EDIL3), mRNA
5093	17812	30429	1.07	5.0E-83	5031690	NT	Homo sapiens EGF-like repeats and discoidin-like domains 3 (EDIL3), mRNA
625	13404	28039	1.72	4.0E-83	AF224699.1	NT	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
977	13742		4.9	3.0E-83	AA388311.1	EST_HUMAN	EST179542 Plectan1 Homo sapiens cDNA similar to similar to endogenous retrovirus ERV9
2780	15485		1.33	3.0E-83	AA632654.1	EST_HUMAN	np87c07.s1 NCI_CGAP_Thy1 Homo sapiens cDNA similar to similar to endogenous retrovirus ERV9 repetitive element;
6483	19250		0.62	3.0E-83	AI217223.1	EST_HUMAN	q773e06.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1755882 3'
1792	14532	27240	1.86	2.0E-83	AA993492.1	EST_HUMAN	o64g05.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1621592 3' similar to TR:Q92814
1792	14532	27241	1.86	2.0E-83	AA993492.1	EST_HUMAN	Q82814 MYELOBLAST KIAA0216.;
1918	14855	27365	4.07	2.0E-83	N06951.1	EST_HUMAN	o64g05.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1621592 3' similar to TR:Q92814
2856	15624	28288	1.1	2.0E-83	BE828694.1	EST_HUMAN	Q82814 MYELOBLAST KIAA0216.;
3283	16025		1.89	2.0E-83	11430834	NT	RC8-E10046-280800-013-H12 E10046 Homo sapiens cDNA
3756	16508		0.7	2.0E-83	AL183202.2	NT	Homo sapiens sal (Drosophila)-like 1 (SALL1), mRNA
4302	17041	29688	4.11	2.0E-83	AF202879.1	NT	Homo sapiens chromosome 21 segment HS21C002
4604	17339	29688	6.14	2.0E-83	7706398	NT	Homo sapiens hematopoietic progenitor cell antigen CD34 precursor (CD34) mRNA, partial cds
4604	17339	29689	6.14	2.0E-83	7706398	NT	Homo sapiens enolysin repeat-containing protein ASB-2 (LOC51878), mRNA
5189	17987	30620	0.9	2.0E-83	U06679.1	NT	Homo sapiens enolysin repeat-containing protein ASB-2 (LOC51878), mRNA
5755	18547	31468	0.85	2.0E-83	11428081	NT	Human carcinoembryonic antigen gene family member 18 (CGM18) gene, exons A1 and B1
5875	18962	31603	1.31	2.0E-83	BE885401.1	EST_HUMAN	Homo sapiens membrane protein CH1 (CH1), mRNA
6647	19408	32423	1.12	2.0E-83	AF129533.1	NT	601507482F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3909068 5'
7335	20017	33095	6.36	2.0E-83	AF129533.1	NT	Homo sapiens F-box protein Fb3b (FBL3B) mRNA, partial cds



Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7704	20387	33480	0.64	2.0E-83	BF105097.1	EST_HUMAN	601822090F1 NIH_MGC_75 Homo sapiens cDNA clone IMAGE:4042318 5'
7742	20438	33580	0.78	2.0E-83	AB001025.1	NT	Homo sapiens mRNA for brain ryanodine receptor, complete cds
7742	20438	33561	0.78	2.0E-83	AB001025.1	NT	Homo sapiens mRNA for brain ryanodine receptor, complete cds
7886	20581	33710	1.79	2.0E-83	U86707.1	NT	Rattus norvegicus dentin-180 mRNA, complete cds
8213	20907	34042	2.05	2.0E-83	AF011920.1	NT	Homo sapiens protein kinase CK2 catalytic subunit alpha gene, exon 1
8213	20907	34043	2.05	2.0E-83	AF011920.1	NT	Homo sapiens protein kinase CK2 catalytic subunit alpha gene, exon 1
9494	22147	35328	0.48	2.0E-83	5453881	NT	Homo sapiens phosphotyrosine kinase, gamma 1 (muscle) (PHKG1) mRNA
9494	22147	35329	0.48	2.0E-83	5453881	NT	Homo sapiens phosphotyrosine kinase, gamma 1 (muscle) (PHKG1) mRNA
9834	22582	35780	4.01	2.0E-83	M22094.1	NT	Human neural cell adhesion molecule (N-CAM) secreted isoform mRNA, 3' end
9834	22582	35781	4.01	2.0E-83	M22094.1	NT	Human neural cell adhesion molecule (N-CAM) secreted isoform mRNA, 3' end
10018	22664	35881	1.39	2.0E-83	AU117659.1	EST_HUMAN	AU117659 HEMBA1 Homo sapiens cDNA clone HEMBA1001910 5'
10089	22737	35952	0.77	2.0E-83	AW505800.1	EST_HUMAN	UI-HF-BN0-and-h-07-0-UJ-r1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3081862 5'
10753	23438	36682	6.64	2.0E-83	11438448	NT	Homo sapiens KIAA0985 protein (KIAA0985), mRNA
10845	23527	36770	2.19	2.0E-83	AL134452.1	EST_HUMAN	DKFZp647J135_j1 547 (synonym: hfbf1) Homo sapiens cDNA clone DKFZp647J135 5'
10845	23527	36771	2.19	2.0E-83	AL134452.1	EST_HUMAN	DKFZp647J135_j1 547 (synonym: hfbf1) Homo sapiens cDNA clone DKFZp647J135 5'
12522	24869		3.85	2.0E-83	AB011399.1	NT	Homo sapiens gene for AF-8, complete cds
1390	14137	26813	2.18	1.0E-83	4504326	NT	Homo sapiens hydroxyacyl-Coenzyme A dehydrogenase/3-ketacyl-Coenzyme A thioesterase/Coenzyme A hydratase (trifunctional protein), beta subunit (HADHB) mRNA
1390	14137	26814	2.18	1.0E-83	4504326	NT	Homo sapiens hydroxyacyl-Coenzyme A dehydrogenase/3-ketacyl-Coenzyme A thioesterase/Coenzyme A hydratase (trifunctional protein), beta subunit (HADHB) mRNA
1442	14189	26873	0.98	1.0E-83	AF105087.1	NT	Homo sapiens lipopolysaccharide-binding protein (LBP) mRNA, complete cds
1442	14189	26874	0.98	1.0E-83	AF105087.1	NT	Homo sapiens lipopolysaccharide-binding protein (LBP) mRNA, complete cds
3179	16942	28593	1.18	1.0E-83	7862349	NT	Homo sapiens cell recognition molecule Casp2 (KIAA0888), mRNA
3850	19000	29237	3.93	1.0E-83	AF053768.1	NT	Rattus norvegicus brain specific cortactin-binding protein CBP90 mRNA, partial cds
4220	19861	29596	1.99	1.0E-83	Z25822.1	NT	H. sapiens gene for mitochondrial dodecenoyl-CoA delta-12-acylase, exon 3
4831	17562	30164	3.36	1.0E-83	4502106	NT	Homo sapiens amyloid beta (A4) precursor protein (protease resistant, Alzheimer disease) (APP), mRNA
6596	19359	32373	1.65	1.0E-83	AI027614.1	EST_HUMAN	069b08.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1645431 3' similar to gb:U64241 QM PROTEIN (HUMAN);
3776	18528	29187	3.8	7.0E-84	BE901209.1	EST_HUMAN	601678023F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3659853 5'
1272	14021	26887	3.5	6.0E-84	BE838894.1	EST_HUMAN	RC2-FN0119-200600-011-g05 FN0119 Homo sapiens cDNA
1272	14021	26888	3.5	6.0E-84	BE838894.1	EST_HUMAN	RC2-FN0119-200600-011-g05 FN0119 Homo sapiens cDNA
2396	15117	27854	8.26	6.0E-84	AA776574.1	EST_HUMAN	ae86a03.at1 Stratiotes schizobrain S11 Homo sapiens cDNA clone IMAGE:971020 3'
5180	17892		3.33	6.0E-84	AL042863.2	EST_HUMAN	DKFZp434H0322_r1 434 (synonym: hlee3) Homo sapiens cDNA clone DKFZp434H0322 5'

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## Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5431	18230	30943	1.87	6.0E-84	AA897339.1	EST_HUMAN	ai47g03.s1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1460500 3' similar to gb:M14338 VITAMIN K-DEPENDENT PROTEIN S PRECURSOR (HUMAN);
5574	18371	31282	1.04	6.0E-84	11428718	NT	Homo sapiens acyl-LDL receptor; SREC=scavenger receptor expressed by endothelial cells (SREC); mRNA
5574	18371	31283	1.04	6.0E-84	11428718	NT	Homo sapiens acyl-LDL receptor; SREC=scavenger receptor expressed by endothelial cells (SREC); mRNA
7373	20053	33134	2.94	6.0E-84	BE810371.1	EST_HUMAN	PMO-LT0019-100800-004-F02 LT0019 Homo sapiens cDNA
7591	20259	33367	0.97	6.0E-84	AF038391.1	NT	Homo sapiens pre-mRNA splicing factor (PRP-16) mRNA, complete cds
7972	20667	33789	2.37	6.0E-84	BE770199.1	EST_HUMAN	PM4-F70054-160800-004-e10 F70054 Homo sapiens cDNA
697	13472	26121	0.71	5.0E-84	AA382811.1	EST_HUMAN	EST00004 Testis I Homo sapiens cDNA 5' end
3013	15779		1.82	5.0E-84	AF109718.1	NT	Homo sapiens chromosome 3 subtelomeric region
6016	18798	31758	0.59	5.0E-84	AA167678.1	EST_HUMAN	zp38e07.r1 Striatone INT neuron (#837233) Homo sapiens cDNA clone IMAGE:632100 5' similar to TR:Q483915 G483915 RETROTRANSPOSABLE L1 ELEMENT LRE2 FROM CHROMOSOME 1Q.;
11633	24133	37438	3.17	5.0E-84	11428740	NT	Homo sapiens regulatory factor X, 3 (influences HLA class II expression) (RFX3), mRNA
11652	24249	37570	1.77	5.0E-84	AB032957.1	NT	Homo sapiens mRNA for KIAA1131 protein, partial cds
11652	24249	37571	1.77	5.0E-84	AB032957.1	NT	Homo sapiens mRNA for KIAA1131 protein, partial cds
11613	24401	37738	1.44	5.0E-84	11433550	NT	Homo sapiens tropomodulin 2 (neuronal) (TMOD2), mRNA
1389	14136	28812	2.19	4.0E-84	AF685321.1	EST_HUMAN	wa76c04.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2302088 3' similar to SW:NRDC_HUMAN O43847 NARDILYSIN PRECURSOR;
4897	17624	30242	1.79	4.0E-84	AF069601.2	NT	Homo sapiens myosin light chain kinase isoform 2 (MLCK) mRNA, complete cds
5476	18274	31168	1.36	4.0E-84	11388168	NT	Homo sapiens protein tyrosine phosphatase, receptor type, G (PTPRG), mRNA
5476	18274	31169	1.36	4.0E-84	11388168	NT	Homo sapiens protein tyrosine phosphatase, receptor type, G (PTPRG), mRNA
6175	18952	31825	1.88	4.0E-84	AF059650.1	NT	Homo sapiens Histone deacetylase 3 (HDAC3) gene, complete cds
7547	20217	33319	14.38	4.0E-84	11421328	NT	Homo sapiens KIAA0783 gene product (KIAA0783), mRNA
8809	21601	34947	1.21	4.0E-84	4557528	NT	Homo sapiens disc, large (Drosophila) homolog 2 (chepeyn-110) (DLG2) mRNA
8809	21601	34948	1.21	4.0E-84	4557528	NT	Homo sapiens disc, large (Drosophila) homolog 2 (chepeyn-110) (DLG2) mRNA
10635	23517	36759	4.51	4.0E-84	AB032956.1	NT	Homo sapiens mRNA for KIAA1130 protein, partial cds
308	13112	25752	1.24	3.0E-84	AF028200.1	NT	Homo sapiens Bach1 protein homolog mRNA, partial cds
1953	14888	27401	1.15	3.0E-84	5453855	NT	Homo sapiens pericentriolar material 1 (PCM1) mRNA
2001	14736	27460	2.41	3.0E-84	AL096880.1	NT	Novel human mRNA containing Zinc finger C2H2 type domains
3578	16333	28977	1.07	3.0E-84	AB028898.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
3731	16483	29121	5.2	3.0E-84	AF014459.1	NT	Homo sapiens X-linked juvenile retinoschistis precursor protein (XLR51) mRNA, complete cds

Table 4

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10790	23473		3.55	3.0E-84	AB83801.1	EST_HUMAN	wu20d05.x1 Soares_Dieckgraefe_colon_NHCD Homo sapiens cDNA clone IMAGE:2520585 3' similar to
2098	14829	27563	6.94	2.0E-84	BE695397.1	EST_HUMAN	gb:L05093 cOS RIBOSOMAL PROTEIN L18A (HUMAN);
2098	14829	27564	6.94	2.0E-84	BE695397.1	EST_HUMAN	CM1-BT0795-190600-272-508 BT0785 Homo sapiens cDNA
2944	15710	28362	9.31	2.0E-84	AF039843.1	NT	CM1-BT0795-190600-272-508 BT0785 Homo sapiens cDNA
2962	15728	28378	0.77	2.0E-84	X89211.1	NT	Homo sapiens myelin transcription factor 1-like (MYT1L) mRNA, complete cds
6439	18238	30952	0.92	2.0E-84	BF511576.1	EST_HUMAN	H. sapiens DNA for endogenous retroviral like element
6439	18238	30953	0.92	2.0E-84	BF511576.1	EST_HUMAN	UIH-BI4-ed-e-02-0-UL1 NCI CGAP Sub8 Homo sapiens cDNA clone IMAGE:3084963 3'
6540	18305	32310	0.75	2.0E-84	H63370.1	EST_HUMAN	UIH-BI4-ed-e-02-0-UL1 NCI CGAP Sub8 Homo sapiens cDNA clone IMAGE:3084963 3'
7958	20851		1.35	2.0E-84	AI208674.1	EST_HUMAN	yr56e11.s1 Soares fetal liver spleen 1NF1S Homo sapiens cDNA clone IMAGE:209324 3'
8284	20978	34118	0.49	2.0E-84	AL163204.2	NT	qm87c09.x1 NCI CGAP Lu5 Homo sapiens cDNA clone IMAGE:1866728 3'
8284	20978	34119	0.48	2.0E-84	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
9245	21924	35094	0.81	2.0E-84	AU120280.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C004
9631	22283	35476	0.61	2.0E-84	H22841.1	EST_HUMAN	ALU120280 HEMBB1 Homo sapiens cDNA clone HEMBB1000339 5'
12159	24843	31100	3	2.0E-84	BF448000.1	EST_HUMAN	ym49e11.1 Soares infant brain 1NIB Homo sapiens cDNA clone IMAGE:51383 5' similar to SP-APOH_RAT
12159	24843	31101	3	2.0E-84	BF448000.1	EST_HUMAN	P28644 BETA-2-GLYCOPROTEIN I ;
304	13108	25748	1.89	1.0E-84	AF114488.1	NT	nee30a02.x1 Lupski_sympathetic_trunk Homo sapiens cDNA clone IMAGE:4090251 3' similar to
536	13319	25953	20.84	1.0E-84	4507952	NT	TR-Q8UGS3 Q8UGS3 DJ756G23.1 ;
703	13478		1	1.0E-84	11427631	NT	TR-Q8UGS3 Q8UGS3 DJ756G23.1 ;
1270	14019	26685	3.17	1.0E-84	AA984379.1	EST_HUMAN	Homo sapiens Intersectin short isoform (ITSN) mRNA, complete cds
2048	14781	27508	1.92	1.0E-84	BE392137.1	EST_HUMAN	Homo sapiens tyrosine 3-monooxygenase/tyrosinase 5-monooxygenase activation protein, zeta polypeptide (VWHAZ) mRNA
2220	14948	27686	1.13	1.0E-84	11427107	NT	Homo sapiens complement component 5 (C5), mRNA
3733	18486	29123	2.46	1.0E-84	AA720851.1	EST_HUMAN	am95b11.s1 Strategene schizo brain S11 Homo sapiens cDNA clone IMAGE:1629885 3'
4383	17120	29752	5.01	1.0E-84	AJ228041.1	NT	601308006F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3428257 5'
4651	17385	30017	3.53	1.0E-84	ALD4314.2	EST_HUMAN	Homo sapiens pericentriolar material 1 (PCM1), mRNA
4651	17385	30018	3.53	1.0E-84	ALD4314.2	EST_HUMAN	rwt12e06.s1 NCI CGAP_SST1 Homo sapiens cDNA clone IMAGE:1239106 3'
4655	17120	29752	2.67	1.0E-84	AJ228041.1	NT	Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22; segment 1/3
5153	17870	30483	1.15	1.0E-84	7656098	NT	DKFZp434N0323_j1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434N0323 5'
5830	18619	31551	0.98	1.0E-84	11434422	NT	DKFZp434N0323_j1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434N0323 5'
							Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22; segment 1/3
							Homo sapiens catenin (cadherin-associated protein), alpha 2 (CTNNA2), mRNA
							Homo sapiens speckle-type POZ protein (SPOP), mRNA

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6097	18875	31844	1.41	1.0E-84	S73482.1	NT	uterine water channel-28 kDa erythrocyte integral membrane protein homolog [human, uterus, mRNA, 1340 nt]
6781	19525	32552	1.06	1.0E-84	AL049784.1	NT	Novel human gene mapping to chromosome 13
6781	19525	32553	1.06	1.0E-84	AL049784.1	NT	Novel human gene mapping to chromosome 13
7007	19699	32753	2.32	1.0E-84	AL049784.1	NT	Novel human gene mapping to chromosome 13
7369	20049	33130	1.26	1.0E-84	8333984	NT	Homo sapiens polymerase (DNA directed), alpha (POLA), mRNA
7501	20137	33228	2.42	1.0E-84	11430846	NT	Homo sapiens NGF-A binding protein 1 (ERG1 binding protein 1) (NAB1), mRNA
8435	22113		3.05	1.0E-84	5031904	NT	Homo sapiens nuclear transport factor 2 (placental protein 15) (PP15), mRNA
8670	22322	35519	0.53	1.0E-84	AF224511.1	NT	Homo sapiens Ca2+-binding protein CABP3 (CABP3) gene, exon 6 and partial cds
9690	17900	30588	3.05	1.0E-84	4607848	NT	Homo sapiens ubiquitin specific protease 13 (isopeptidase T-3) (USP13), mRNA
9690	17900	30589	3.05	1.0E-84	4607848	NT	Homo sapiens ubiquitin specific protease 13 (isopeptidase T-3) (USP13), mRNA
10490	23142	36368	1.08	1.0E-84	11437358	NT	Homo sapiens glutamate receptor, ionotropic, AMPA 4 (GRIA4), mRNA
12046	24566		2.34	1.0E-84	11417812	NT	Homo sapiens purinergic receptor P2X-like 1, orphan receptor (P2RX1), mRNA
12151	24638	31068	3.2	1.0E-84	11418185	NT	Homo sapiens acyl-CoA oxidase 2, mitochondrial (ACO2), mRNA
946	13712		1.06	9.0E-85	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
1051	13810	26469	2.39	9.0E-85	U51432.1	NT	Homo sapiens nuclear protein Skip mRNA, complete cds
1051	13810	26470	2.39	9.0E-85	U51432.1	NT	Homo sapiens nuclear protein Skip mRNA, complete cds
1360	14108	26783	0.95	9.0E-86	4758669	NT	Homo sapiens leupaxin (LDPL), mRNA
1572	14319	27004	1.23	9.0E-85	M33282.1	NT	Human plasminogen gene, exon 7
1572	14319	27005	1.23	9.0E-85	M33282.1	NT	Human plasminogen gene, exon 7
1670	14415	27108	3.6	9.0E-85	7657020	NT	Homo sapiens DKFZp434P211 protein (DKFZP434P211), mRNA
4225	16966	29591	0.96	9.0E-85	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
4824	17555	30177	0.96	9.0E-85	5801979	NT	Homo sapiens heat shock transcription factor 2 binding protein (HSF2BP), mRNA
4856	17585	30208	1.12	9.0E-85	AL163288.2	NT	Homo sapiens chromosome 21 segment HS21C088
1114	13871	26530	1.45	7.0E-85	LD5094.1	NT	Homo sapiens ribosomal protein L27 mRNA, complete cds
11642	24239		4.32	7.0E-85	AF113210.1	NT	Homo sapiens MSTP030 mRNA, complete cds
11392	23998	37300	3.35	6.0E-85	11438573	NT	Homo sapiens DEADH (Asp-Glu-Ala-AspHis) box polypeptide 10 (RNA helicase) (DDX10), mRNA
11392	23998	37301	3.35	6.0E-85	11438573	NT	Homo sapiens DEADH (Asp-Glu-Ala-AspHis) box polypeptide 10 (RNA helicase) (DDX10), mRNA
11788	24957	37690	1.29	6.0E-85	AA03053.1	EST_HUMAN	Z62801.1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:726889 5' similar to TR:G1335760 G1335760 GAG-POL POLYPROTEIN.;
2332	15056	27792	1.49	5.0E-85	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084

Table 4  
Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4399	17136		0.8	5.0E-85	AF211186.1	NT	Homo sapiens T-type calcium channel alpha1 subunit Alpha1-a isoform (CACNA1I) mRNA, complete cds
5384	18186	30851	1.4	5.0E-85	BF035674.1	EST_HUMAN	601458848F1 NIH_MGC_86 Homo sapiens cDNA clone IMAGE:3862402 5'
5384	18186	30852	1.4	5.0E-85	BF035674.1	EST_HUMAN	601458848F1 NIH_MGC_86 Homo sapiens cDNA clone IMAGE:3862402 5'
11063	23733	37005	2	5.0E-85	AF224698.1	NT	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
12743	17136		5.28	5.0E-85	AF211186.1	NT	Homo sapiens T-type calcium channel alpha1 subunit Alpha1-a isoform (CACNA1I) mRNA, complete cds
5056	18336	31787	1.51	4.0E-85	BF077910.1	EST_HUMAN	602084730F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4246087 5'
5056	18336	31798	1.51	4.0E-85	BF077910.1	EST_HUMAN	602084730F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4246087 5'
10472	23118		1.3	4.0E-85	BE078283.1	EST_HUMAN	RC1-BT0623-120200-011-c07 BT0623 Homo sapiens cDNA
1276	14026	26694	2.98	3.0E-85	AF086187.1	NT	Homo sapiens protein phosphatase 2A BR gamma subunit gene, exon 6
1773	14515	27215	3.51	3.0E-85	T07495.1	EST_HUMAN	ye53g09 r1 Soares fetal liver spleen 1NFSL Homo sapiens cDNA clone IMAGE:121504 5'
4280	17019	29846	6.53	3.0E-85	BE287186.1	EST_HUMAN	601189704F2 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3533616 5'
4841	17571	30194	1.45	3.0E-85	11024695	NT	Homo sapiens F-box only protein 24 (FBXO24), mRNA
4841	17571	30195	1.45	3.0E-85	11024695	NT	Homo sapiens F-box only protein 24 (FBXO24), mRNA
5316	18120	30777	1.07	3.0E-85	11436001	NT	Homo sapiens lactoferrin rich protein (LPRP), mRNA
5994	18776	31737	0.63	3.0E-85	11422024	NT	Homo sapiens met proto-oncogene (hepatocyte growth factor receptor) (MET), mRNA
6043	18823	31783	5.71	3.0E-85	7682309	NT	Homo sapiens KIAA0793 gene product (KIAA0793), mRNA
6043	18823	31784	5.71	3.0E-85	7682309	NT	Homo sapiens KIAA0793 gene product (KIAA0793), mRNA
6953	19553		7.79	3.0E-85	AJ404468.1	NT	Homo sapiens mRNA for dynein heavy chain (DNAH9 gene)
7295	19978	33055	0.91	3.0E-85	11416870	NT	Homo sapiens GTPase regulator associated with the focal adhesion kinase pp125(FAK); KIAA0821 protein (KIAA0821), mRNA
7771	20467	33581	1.89	3.0E-85	U44953.1	NT	Homo sapiens DENN mRNA, complete cds
8406	21099	34235	0.74	3.0E-85	11525820	NT	Homo sapiens CGI-81 protein (LOC51108), mRNA
8877	21588	34712	3.8	3.0E-85	11430889	NT	Homo sapiens phospholipase C, epsilon (PLCE), mRNA
9206	22085	35257	0.96	3.0E-85	11421422	NT	Homo sapiens small nuclear ribonucleoprotein polypeptide B' (SNRPB2), mRNA
9206	22085	35258	0.96	3.0E-85	11421422	NT	Homo sapiens small nuclear ribonucleoprotein polypeptide B' (SNRPB2), mRNA
10381	23027	36242	0.66	3.0E-85	AF088842.1	NT	Homo sapiens phospholipid scramblase mRNA, complete cds
10730	23418	36659	1.98	3.0E-85	BE150392.1	EST_HUMAN	RC1-HT0268-031299-012-009 HT0268 Homo sapiens cDNA
11490	24091	37403	2.25	3.0E-85	5031060	NT	Homo sapiens EGF-like repeats and disocidin-like domains 3 (EDIL3), mRNA
11824	24408	37742	1.79	3.0E-85	AB029030.1	NT	Homo sapiens mRNA for KIAA1107 protein, partial cds
11824	24408	37743	1.79	3.0E-85	AB029030.1	NT	Homo sapiens mRNA for KIAA1107 protein, partial cds
12840	24937		1.98	3.0E-85	11418177	NT	Homo sapiens Ran GTPase activating protein 1 (RANGAP1), mRNA

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1017	13777	26438	2.34	2.0E-85	AF248540.1	NT	Homo sapiens Intersectin 2 (SH3D1B) mRNA, complete cds
1383	14130	26803	0.97	2.0E-85	7706205	NT	Homo sapiens CGI-201 protein (LOC51340), mRNA
1388	14146	26824	8.28	2.0E-85	5174775	NT	Homo sapiens apolipoprotein C-II (APOC2) mRNA
1389	14146	26825	8.28	2.0E-85	5174776	NT	Homo sapiens apolipoprotein C-II (APOC2) mRNA
2228	14854	27082	1.53	2.0E-85	U10525.1	NT	Human DNA polymerase beta gene, exons 12 and 13
2828	14063		5.28	2.0E-85	7667468	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
3022	15788	28435	1.18	2.0E-85	M30938.1	NT	Human Ku (p70/p80) subunit mRNA, complete cds
4300	17039	29068	4.51	2.0E-85	4503880	NT	Homo sapiens plasminogen (PLG) mRNA
4527	17282	29896	1.22	2.0E-85	4828877	NT	Homo sapiens reelin (RELN) mRNA
4854	17684	30207	0.97	2.0E-85	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
9173	21843	38009	3.18	2.0E-85	AF760820.1	EST_HUMAN	w67n08.x1 NCI CGAP_Kd12 Homo sapiens cDNA clone IMAGE:2398431 3' similar to contains element
9549	22202	35385	1.08	2.0E-85	AB114459.1	EST_HUMAN	MSR1 repetitive element 1
10162	22810	36029	1.32	2.0E-85	AB86384.1	EST_HUMAN	w49d03.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2331461 3'
2285	15010		2.86	1.0E-85	BE794300.1	EST_HUMAN	wm94d12.x1 NCI CGAP_U12 Homo sapiens cDNA clone IMAGE:2443607 3'
2392	15113	27850	8.42	1.0E-85	BE618392.1	EST_HUMAN	601591410F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3945818 5'
2392	15113	27851	8.42	1.0E-85	BE618392.1	EST_HUMAN	601482817F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3866021 5'
9081	22333	35528	4.38	1.0E-85	BE257817.1	EST_HUMAN	601482817F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3866021 5'
10842	23524	36706	2.77	1.0E-85	AA778785.1	EST_HUMAN	601108739F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3350553 5'
10842	23524	36767	2.77	1.0E-85	AA778785.1	EST_HUMAN	245603.s1 Soares_fetal_liver_spleen_INFLS_S1 Homo sapiens cDNA clone IMAGE:453245 3'
10819	23599	36847	1.73	1.0E-85	BF311562.1	EST_HUMAN	245603.s1 Soares_fetal_liver_spleen_INFLS_S1 Homo sapiens cDNA clone IMAGE:453245 3'
10819	23599	36848	1.73	1.0E-85	BF311562.1	EST_HUMAN	601897003F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4128440 5'
10897	23670	36827	1.28	1.0E-85	Y00052.1	NT	601897003F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4128440 5'
11773	24394	37696	2.41	1.0E-85	AF198420.1	EST_HUMAN	Human mRNA for T-cell cyclophilin
12050	24722	31053	4.4	1.0E-85	11417862	NT	q53a07.x1 NCI CGAP_Bim25 Homo sapiens cDNA clone IMAGE:1890468 3'
12295	24722	31053	4.74	1.0E-85	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
1409	14159		11.19	9.0E-86	BE274217.1	EST_HUMAN	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
11698	24263	37618	1.57	8.0E-86	4503224	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
918	13683	26345	2.34	7.0E-86	AA860801.1	EST_HUMAN	601120778F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:2867880 5'
918	13683	26346	2.34	7.0E-86	AA860801.1	EST_HUMAN	Homo sapiens cytochrome P450, subfamily IIF, polypeptide 1 (CYP2F1) mRNA
6103	18881	31848	1.02	7.0E-86	9068888	NT	q88f08.s1 Soares_papillary_thyroid_tumor_NHHPA Homo sapiens cDNA clone IMAGE:1403550 3'
6103	18881	31849	1.02	7.0E-86	9068888	NT	q88f08.s1 Soares_papillary_thyroid_tumor_NHHPA Homo sapiens cDNA clone IMAGE:1403550 3'
8880	17958	30653	0.65	7.0E-86	11421737	NT	Homo sapiens tumor endothelial marker 7 precursor (TEM7), mRNA
8843	21335	34479	3.06	7.0E-86	U38557.1	NT	Homo sapiens tumor endothelial marker 7 precursor (TEM7), mRNA
							Homo sapiens Tax1 (human T-cell leukemia virus type I) binding protein 1 (TAX1BP1), mRNA
							Homo sapiens galactose oxidase (GALC) gene, exon 15

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9569	22252		1.39	7.0E-88	5483997	NT	Homo sapiens RAN binding protein 7 (RANBP7), mRNA
9568	22310	35508	2.27	7.0E-88	11526307	NT	Homo sapiens DGeorge syndrome critical region gene 6 (DGCRL6), mRNA
10882	23562	36809	1.72	7.0E-88	11417012	NT	Homo sapiens similar to transcription factor CA150 (H. sapiens) (LOC63170), mRNA
10882	23562	36810	1.72	7.0E-88	11417012	NT	Homo sapiens similar to transcription factor CA150 (H. sapiens) (LOC63170), mRNA
1271	14020	26686	2.88	6.0E-88	4505492	NT	Homo sapiens oxoglutarate dehydrogenase (liponitride) (OGDH), mRNA
5105	17823	30440	2.64	6.0E-88	Y19139.1	NT	Homo sapiens enteropeptidase gene, exons 20 and 21
5107	17825	30442	1.07	6.0E-88	6005833	NT	Homo sapiens 24 kDa intrinale membrane protein (PMP24), mRNA
206	13018	25660	4.98	4.0E-88	BE547173.1	EST_HUMAN	601072594F1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3458830 5'
5944	18726	31684	12.1	4.0E-88	BE285843.1	EST_HUMAN	601176865F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3531863 5'
11205	13018	25660	2.18	4.0E-88	BE547173.1	EST_HUMAN	601072594F1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3458830 5'
5509	18307	31208	6.97	3.0E-88	AW340946.1	EST_HUMAN	xz92h12.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:2871719 3'
8160	20854	33985	1.05	3.0E-88	AV722329.1	EST_HUMAN	AV722329 HTB Homo sapiens cDNA clone HTBBS004 5'
10120	22768	35980	3.37	3.0E-88	BE880479.1	EST_HUMAN	601509096F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3911303 5'
10120	22768	35981	3.37	3.0E-88	BE880479.1	EST_HUMAN	601509096F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3911303 5'
11413	23180	36408	5.14	3.0E-88	AI659240.1	EST_HUMAN	tu18b02.x1 NCI_CGAP_P128 Homo sapiens cDNA clone IMAGE:2251371 3'
11708	24303	37628	1.8	3.0E-88	11037056	NT	Homo sapiens myosin X (MYO10), mRNA
260	13068	25708	2.02	2.0E-88	AA306284.1	EST_HUMAN	EST177232 Jurkat T-cells V1 Homo sapiens cDNA 5' end
405	13190		2.59	2.0E-88	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
1168	13922	26584	3.21	2.0E-88	N58977.1	EST_HUMAN	yz19a08.J1 Soares multiple sclerosis 2NBH-MSP Homo sapiens cDNA clone IMAGE:283478 5'
1478	14225	28910	1.93	2.0E-88	4758827	NT	Homo sapiens neuradin III (NRXN3) mRNA
1478	14225	28911	1.93	2.0E-88	4758827	NT	Homo sapiens neuradin III (NRXN3) mRNA
2188	14917	27651	5.09	2.0E-88	8635487	NT	Human endogenous retrovirus, complete genome
2266	14992	27732	1.55	2.0E-88	AB033103.1	NT	Homo sapiens mRNA for KIAA1277 protein, partial cds
3410	16188	28817	1.3	2.0E-88	AW906142.1	EST_HUMAN	EST378215 MAGE resequences, MAGI Homo sapiens cDNA
3729	16481	29118	3.54	2.0E-88	AF166776.1	NT	Homo sapiens lysophosphatidic acid acyltransferase-delta (LPAAT-delta) mRNA, complete cds
3729	16481	29119	3.64	2.0E-88	AF166776.1	NT	Homo sapiens lysophosphatidic acid acyltransferase-delta (LPAAT-delta) mRNA, complete cds
4019	16765		2.84	2.0E-88	AW515742.1	EST_HUMAN	hd87g09.x1 NCI_CGAP_GC8 Homo sapiens cDNA clone IMAGE:2916542 3'
4737	17469	30106	3.26	2.0E-88	AF056490.1	NT	Homo sapiens cAMP-specific phosphodiesterase 8A (PDE8A) mRNA, partial cds
5782	18573	31501	1.52	2.0E-88	Z16411.1	NT	H. sapiens mRNA encoding phospholipase c
5782	18573	31602	1.52	2.0E-88	Z16411.1	NT	H. sapiens mRNA encoding phospholipase c
6974	25098	32476	0.69	2.0E-88	11419429	NT	Homo sapiens similar to eukaryotic pyrophosphatase/phosphodiesterase 3 (H. sapiens) (LOC63214), mRNA
7908	20603	33733	0.69	2.0E-88	U84744.1	NT	Human Chediak-Higashi syndrome protein short isoform (LYST) mRNA, complete cds
8414	21107		0.47	2.0E-88	AL163227.2	NT	Homo sapiens chromosome 21 segment HS21C002

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8472	21164	34307	2.31	2.0E-86	11437135	NT	Homo sapiens butyrobetaine (gamma), 2-oxoglutarate dioxygenase (gamma-butyrobetaine hydroxylase) (BBOX), mRNA
8472	21164	34308	2.31	2.0E-86	11437135	NT	Homo sapiens butyrobetaine (gamma), 2-oxoglutarate dioxygenase (gamma-butyrobetaine hydroxylase) (BBOX), mRNA
8801	21493	34640	0.65	2.0E-86	10633876	NT	Homo sapiens phospholipid scramblase 1 (PLSCR1), mRNA
9218	21897	35067	1.95	2.0E-86	11422084	NT	Homo sapiens chromosome segregation 1 (yeast homolog)-like (CSE1L), mRNA
10345	22992	36210	2.91	2.0E-86	11546846	NT	Homo sapiens basic-helix-loop-helix-PAS protein (NPAS3), mRNA
10345	22992	36211	2.91	2.0E-86	11546846	NT	Homo sapiens basic-helix-loop-helix-PAS protein (NPAS3), mRNA
10400	23046	36282	1.15	2.0E-86	AB037832.1	NT	Homo sapiens mRNA for KIAA1411 protein, partial cds
10820	23503	36742	2.64	2.0E-86	4756051	NT	Homo sapiens ribosomal protein S9 kinase, 90kD, polypeptide 5 (RPS8KA6) mRNA
12458	24927	31027	3.07	2.0E-86	11418189	NT	Homo sapiens thyroid autoantigen 70kD (Ku antigen) (G22P1), mRNA
12621	24928		4.26	2.0E-86	AB011399.1	NT	Homo sapiens gene for AF-8, complete cds
1592	14938	27027	2.28	1.0E-86	4828855	NT	Homo sapiens NADH dehydrogenase (ubiquinone) Fe-S protein 1 (75kD) (NADH-coenzyme Q reductase) (NDUFS1) mRNA
3160	15923	28569	1.3	1.0E-86	5453649	NT	Homo sapiens fibulin 5 (FBLN5) mRNA
3229	15902	28645	2.7	1.0E-86	L20492.1	NT	Human gamma-glutamyl transpeptidase mRNA, complete cds
3290	16051	28689	1.32	1.0E-86	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
3290	16051	28700	1.32	1.0E-86	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
3926	16878	29318	0.88	1.0E-86	7706161	NT	Homo sapiens hypothetical protein (LOC51318), mRNA
3926	16878	29319	0.88	1.0E-86	7706161	NT	Homo sapiens hypothetical protein (LOC51318), mRNA
4233	16974	29589	6.2	1.0E-86	AL163300.2	NT	Homo sapiens chromosome 21 segment HS21C100
4578	17313	29641	1.23	1.0E-86	4507334	NT	Homo sapiens synaptobrevin 1 (SYNJ1), mRNA
5465	18284	31155	2	1.0E-86	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
11606	18264	31155	1.37	1.0E-86	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
5272	18078		1.81	9.0E-87	AI160703.1	EST_HUMAN	q177c09.x1 Scores: feld_heart_Nb-H19W Homo sapiens cDNA clone IMAGE:1708128 3' similar to SW:K1CJ_MOUSE P02636 KERATIN, TYPE I CYTOSKELETAL 10 ;
7348	20029	33105	1.7	9.0E-87	4757721	NT	Homo sapiens a dihydrog and metalloproteinase domain 22 (ADAM22), mRNA
7348	20029	33106	1.7	9.0E-87	4757721	NT	Homo sapiens a dihydrog and metalloproteinase domain 22 (ADAM22), mRNA
467	13252	25893	15.93	8.0E-87	X62245.1	NT	O. cuniculus mRNA for elongation factor 1 alpha
2294	15019	27755	1.79	7.0E-87	BF063211.1	EST_HUMAN	7h85f02.x1 NCI_CGAP_Cot16 Homo sapiens cDNA clone IMAGE:3322779 3'
2294	15019	27756	1.79	7.0E-87	BF063211.1	EST_HUMAN	7h85f02.x1 NCI_CGAP_Cot16 Homo sapiens cDNA clone IMAGE:3322779 3'
6307	19079	32084	0.57	7.0E-87	AW590336.1	EST_HUMAN	MR0-NT0039-020500-004-411 NT0039 Homo sapiens cDNA
8089	20783	33913	3.4	7.0E-87	BF362776.1	EST_HUMAN	IL3-HT0619-060700-198-D10 HT0619 Homo sapiens cDNA
9354	20425	33544	1.15	7.0E-87	BE712961.1	EST_HUMAN	IL5-HT0702-160600-103-408 HT0702 Homo sapiens cDNA



Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9971	22819	35822	3.85	7.0E-87	AL043314.2	EST_HUMAN	DKFZp434N0323_1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434N0323 5'
9971	22819	36823	3.85	7.0E-87	AL043314.2	EST_HUMAN	DKFZp434N0323_1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434N0323 5'
10306	25129		0.51	7.0E-87	AI081565.1	EST_HUMAN	cc59h01.s1 Soares_NHMPu_S1 Homo sapiens cDNA clone IMAGE:1600657 3'
10806	23489	36724	6.65	7.0E-87	K03002.1	NT	Human mRNA from chromosome 15 gene with homology to MHC-HLA-SB-1 Intron A
10806	23489	36725	6.65	7.0E-87	K03002.1	NT	Human mRNA from chromosome 15 gene with homology to MHC-HLA-SB-1 Intron A
3517	16273	28927	0.90	6.0E-87		NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
5128	17846	30463	0.89	6.0E-87	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
6327	19097	32065	2.02	6.0E-87	AB028004.1	NT	Homo sapiens mRNA for KIAA1081 protein, partial cds
10625	23318		4.13	6.0E-87	11432444	NT	Homo sapiens similar to SET translocation (myeloid leukemia-associated) (H. sapiens) (LOC83102), mRNA
1135	13891	28551	1.42	5.0E-87	AA382811.1	EST_HUMAN	EST196094 Testis 1 Homo sapiens cDNA 5' end
12297	13891	28551	1.56	5.0E-87	AA382811.1	EST_HUMAN	EST196094 Testis 1 Homo sapiens cDNA 5' end
946	13711	26376	1.51	4.0E-87	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
1149	13904	26506	13.59	4.0E-87	AB037835.1	NT	Homo sapiens mRNA for KIAA1414 protein, partial cds
2024	14759	27488	1.63	4.0E-87	AB007825.1	NT	Homo sapiens mRNA for KIAA0456 protein, partial cds
2421	15142	27874	1.03	4.0E-87	7705298	NT	Homo sapiens OGI-60 protein (LOC51626), mRNA
2421	15142	27875	1.03	4.0E-87	7706290	NT	Homo sapiens OGI-60 protein (LOC51626), mRNA
3457	16213	28868	1.8	4.0E-87	6174574	NT	Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (lithorex (Drosophila) homolog); translocated to, 4 (MLLT4) mRNA
5360	18162	30846	2.77	4.0E-87	O00321	SWISSPROT	ETS-RELATED PROTEIN 71 (ETS TRANSLOCATION VARIANT 2)
5654	18736	31695	4.83	4.0E-87	BE247284.1	EST_HUMAN	TCBAP1E4051 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP4051
7070	20334	33445	0.72	4.0E-87	L49524.1	NT	Homo sapiens tuberin (TSC2) gene, exon 10
11118	23788	37065	3.44	4.0E-87	M60578.1	NT	Human von Willebrand factor pseudogene corresponding to exons 23 through 34
12396	26268	30721	1.5	4.0E-87	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
12396	25268	30722	1.5	4.0E-87	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
12541	24881		2.25	4.0E-87	11417812	NT	Homo sapiens purinergic receptor P2X-like 1, orphan receptor (P2RXL1), mRNA
2779	15484	28223	2.77	2.0E-87	4885420	NT	Homo sapiens high-mobility group (nonhistone chromosomal) protein 4 (HMG4) mRNA
3784	18516	29154	0.83	2.0E-87	AL116635.1	EST_HUMAN	AU116635 HEMBA1 Homo sapiens cDNA clone HEMBA1000307 5'
4857	17586	30209	1.28	2.0E-87	BF376311.1	EST_HUMAN	CMO-TN0038-150900-562108 TN0038 Homo sapiens cDNA
4907	17634	30249	1.47	2.0E-87	BE179478.1	EST_HUMAN	RC6-HT0580-200300-031-G04 HT0580 Homo sapiens cDNA
5575	18372	31284	10.34	2.0E-87	BE734190.1	EST_HUMAN	601568041F1 NIH_MGC 21 Homo sapiens cDNA clone IMAGE:3843730 5'
5575	18372	31285	10.34	2.0E-87	BE734190.1	EST_HUMAN	601568041F1 NIH_MGC 21 Homo sapiens cDNA clone IMAGE:3843730 5'
6234	19008		9.81	2.0E-87	BE567183.1	EST_HUMAN	601341383F1 NIH_MGC 53 Homo sapiens cDNA clone IMAGE:3683348 5'

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## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6599	19362	32375	0.69	2.0E-87	N48128.1	EST_HUMAN	W21e07.r1 Soares fetal liver spleen tNfLS Homo sapiens cDNA clone IMAGE:243398 5'
6683	19600	32638	0.81	2.0E-87	AV654143.1	EST_HUMAN	AV654143 GLC Homo sapiens cDNA clone GLCDSG04 3'
7073	19764	32828	1.58	2.0E-87	BE294432.1	EST_HUMAN	601176032F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3531511 5'
7128	19814	32882	0.94	2.0E-87	11433046	NT	Homo sapiens heart domain and RLD 2 (HERC2), mRNA
7363	20034	33112	39.61	2.0E-87	N48128.1	EST_HUMAN	W21e07.r1 Soares fetal liver spleen tNfLS Homo sapiens cDNA clone IMAGE:243398 5'
7587	20255	33362	35.45	2.0E-87	N48128.1	EST_HUMAN	W21e07.r1 Soares fetal liver spleen tNfLS Homo sapiens cDNA clone IMAGE:243398 5'
8284	20888	34127	17.42	2.0E-87	X52851.1	NT	Human cyclophilin gene for cyclophilin (EC 5.2.1.8)
9885	22337		5.72	2.0E-87	BE631136.1	EST_HUMAN	601278315F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3810539 5'
1159	15521		2.09	1.0E-87	7705683	NT	Homo sapiens putative glycolipid transfer protein (LOC51054), mRNA
1411	14158	26840	1.1	1.0E-87	AW361977.1	EST_HUMAN	PM2-CT0265-141088-001-g04 CT0265 Homo sapiens cDNA
1411	14158	26841	1.1	1.0E-87	AW361977.1	EST_HUMAN	PM2-CT0265-141088-001-g04 CT0265 Homo sapiens cDNA
3887	16451	28090	6.23	1.0E-87	Y00052.1	NT	Human mRNA for T-cell cyclophilin
3717	16470	28108	2.43	1.0E-87	4758827	NT	Homo sapiens neuroxin III (NRXN3), mRNA
5086	17814	30431	0.69	1.0E-87	AF114487.1	NT	Homo sapiens intersectin long isoform (ITSN), complete cds
5086	17814	30432	0.69	1.0E-87	AF114487.1	NT	Homo sapiens intersectin long isoform (ITSN), complete cds
5149	12933	25570	1.04	1.0E-87	AI004091.1	EST_HUMAN	650404.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1620199 3'
6132	18910	31878	1.91	1.0E-87	AF073371.1	NT	Homo sapiens growth factor receptor-bound protein 10 (GRB10) gene, exon 8
6132	18910	31879	1.91	1.0E-87	AF073371.1	NT	Homo sapiens growth factor receptor-bound protein 10 (GRB10) gene, exon 8
7077	19768	32832	0.62	1.0E-87	AF039517.1	NT	Homo sapiens corticotropin-releasing factor type 1 receptor gene, exon 8
7077	19768	32833	0.62	1.0E-87	AF039517.1	NT	Homo sapiens corticotropin-releasing factor type 1 receptor gene, exon 8
7083	19773	32838	1.18	1.0E-87	4506786	NT	Homo sapiens IQ motif containing GTPase activating protein 1 (IQGAP1), mRNA
7288	18981	33057	1.23	1.0E-87	11431590	NT	Homo sapiens protein kinase C, beta 1 (PRKCB1), mRNA
8016	20710	33840	12.83	1.0E-87	AF214592.1	NT	Homo sapiens tracheal epithelium enriched protein (PLUNC) gene, complete cds
8807	21499	34644	0.97	1.0E-87	AB022918.1	NT	Homo sapiens mRNA for alpha2,3-sialyltransferase ST3Gal VI, complete cds
8807	21499	34645	0.97	1.0E-87	AB022918.1	NT	Homo sapiens mRNA for alpha2,3-sialyltransferase ST3Gal VI, complete cds
9533	22188	36371	2.86	1.0E-87	BE816183.1	EST_HUMAN	RC8-BN0276-050700-012-E02 BN0276 Homo sapiens cDNA
9533	22188	36372	2.85	1.0E-87	BE816183.1	EST_HUMAN	RC8-BN0276-050700-012-E02 BN0276 Homo sapiens cDNA
10272	22920	36131	0.87	1.0E-87	M34428.1	NT	Human L-plastin mRNA, 5' end
10633	23325	36582	1.55	1.0E-87	5729887	NT	Homo sapiens heart domain and RLD 2 (HERC2), mRNA
10921	23601		1.92	1.0E-87	D10083.1	NT	Homo sapiens RGH1 gene, retrovirus-like element
10865	23641	36863	1.88	1.0E-87	5031690	NT	Homo sapiens EGF-like repeats and discockin I-like domains 3 (EDIL3), mRNA
10865	23641	36864	1.88	1.0E-87	5031690	NT	Homo sapiens EGF-like repeats and discockin I-like domains 3 (EDIL3), mRNA
12393	26404		3.54	1.0E-87	7657632	NT	Homo sapiens sulfotransferase-related protein (SULTX3), mRNA
12808	25240		3.94	1.0E-87	7657632	NT	Homo sapiens sulfotransferase-related protein (SULTX3), mRNA

Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1084	13842	28500	10.24	9.0E-88	AF167485.1	NT	Homo sapiens double stranded RNA activated protein kinase (PKR) gene, exon 12
1327	14076	28750	2.76	9.0E-88	AB037820.1	NT	Homo sapiens mRNA for KIAA1399 protein, partial cds
1327	14076	28751	2.76	9.0E-88	AB037820.1	NT	Homo sapiens mRNA for KIAA1399 protein, partial cds
2116	14846	27575	1.57	9.0E-88	7681701	NT	Homo sapiens DKFZP588P1522 protein (DKFZP588P1522), mRNA
3817	16370	29012	1.35	9.0E-88	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
4236	16977	29802	2.73	9.0E-88	X91828.1	NT	H. sapiens ECE-1 gene (exon 9)
4236	16977	29803	2.73	9.0E-88	X91829.1	NT	H. sapiens ECE-1 gene (exon 9)
4943	17670	30279	1.05	9.0E-88	AB026898.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
8919	21610	34754	3.82	8.0E-88	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
1820	14559		1.02	5.0E-88	7681887	NT	Homo sapiens KIAA0063 gene product (KIAA0063), mRNA
2645	15355	28100	3.76	5.0E-88	N89399.1	EST_HUMAN	K9710F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA clone K9719 5' similar to ZINC FINGER PROTEIN HZF1
3000	15788	28414	0.9	5.0E-88	AF114488.1	NT	Homo sapiens Intersectin short isoform (ITSN) mRNA, complete cds
3384	16143		2.28	5.0E-88	AI693217.1	EST_HUMAN	repetitive element/containing element MER22 MER22 repetitive element;
4687	17421	30058	0.83	5.0E-88	AF114488.1	NT	Homo sapiens Intersectin short isoform (ITSN) mRNA, complete cds
6672	19569	32625	3.19	5.0E-88	H10832.1	EST_HUMAN	YMO0570.1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:47129 5'
7630	20525	33650	1.8	5.0E-88	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
9211	21890	35057	0.45	6.0E-88	BF680206.1	EST_HUMAN	602154068F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4285775 5'
1308	14056	28729	1.42	4.0E-88	BF091229.1	EST_HUMAN	PM1-TN0028-050900-004-110 TN0028 Homo sapiens cDNA
1308	14056	28730	1.42	4.0E-88	BF091229.1	EST_HUMAN	PM1-TN0028-050900-004-110 TN0028 Homo sapiens cDNA
7143	19830	32698	1.43	4.0E-88	11418585	NT	Homo sapiens transforming growth factor, beta-induced, 68kD (TGFB1), mRNA
10827	23509	36749	1.8	4.0E-88	4502894	NT	Homo sapiens cell division cycle 10 (homologous to CDC10 of S. cerevisiae) (CDC10) mRNA
11471	24072	37380	1.89	4.0E-88	7681947	NT	Homo sapiens KIAA0152 gene product (KIAA0152), mRNA
11471	24072	37381	1.89	4.0E-88	7681947	NT	Homo sapiens KIAA0152 gene product (KIAA0152), mRNA
715	13489	26140	1.85	3.0E-88	11545800	NT	Homo sapiens hypothetical protein FLJ21634 (FLJ21634), mRNA
1805	14546		1.98	3.0E-88	4508020	NT	Homo sapiens zinc finger protein 259 (ZNF259) mRNA
2948	15714	28367	4.11	3.0E-88	N66051.1	EST_HUMAN	z48f12.s1 Soares fetal liver spleen 1N1FLS Homo sapiens cDNA clone IMAGE:266823 3'
4216	16957	29679	1.24	3.0E-88	4501912	NT	Homo sapiens a disintegrin and metalloproteinase domain 23 (ADAM23) mRNA
4216	16957	29680	1.24	3.0E-88	4501912	NT	Homo sapiens a disintegrin and metalloproteinase domain 23 (ADAM23) mRNA
4444	17180		4.06	3.0E-88	11423800	NT	Homo sapiens hypothetical protein FLJ20220 (FLJ20220), mRNA
5216	18024	30048	2.85	3.0E-88	11423667	NT	Homo sapiens vesicle-containing protein (VCP), mRNA

Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5498	18298	31194	4.13	3.0E-88	9886888	NT	Homo sapiens polycystic renal cell carcinoma (PRV1), mRNA
5618	18414	31327	3.56	3.0E-88	11420907	NT	Homo sapiens v-ral similar leukemia viral oncogene homolog A (ras related) (BALA), mRNA
6069	18848	31812	0.81	3.0E-88	11417370	NT	Homo sapiens interleukin 13 (IL13), mRNA
6319	25088	32076	1.18	3.0E-88	11419210	NT	Homo sapiens activator of S phase kinase (ASK), mRNA
6319	25088	32077	1.18	3.0E-88	11419210	NT	Homo sapiens activator of S phase kinase (ASK), mRNA
6965	19447	32465	14.59	3.0E-88	AF278265.1	NT	Homo sapiens putative anion transporter 1 mRNA, complete cds
7440	20117	33206	0.15	3.0E-88	11436400	NT	Homo sapiens retinoblastoma-binding protein 2 (RBBP2), mRNA
7821	20516	33642	0.58	3.0E-88	11421726	NT	Homo sapiens growth differentiation factor 5 (cartilage-derived morphogenetic protein-1) (GDF5), mRNA
8096	20790	33921	1.35	3.0E-88	AF034374.1	NT	Homo sapiens myoblast fusion factor biosynthesis protein A and myoblast fusion cofactor biosynthesis protein C mRNA, complete cds
9334	20405	33621	1.99	3.0E-88	11528262	NT	Homo sapiens v-ets avian erythroblastosis virus E26 oncogene related (ERG), mRNA
9828	22479	35890	0.58	3.0E-88	AB015228.1	NT	Homo sapiens mRNA for RALDH2-T, complete cds
9828	22479	35891	0.58	3.0E-88	AB015228.1	NT	Homo sapiens mRNA for RALDH2-T, complete cds
9857	22507	35705	1.28	3.0E-88	11439085	NT	Homo sapiens acyl-Coenzyme A dehydrogenase family, member 8 (ACAD8), mRNA
12139	24628		5.97	3.0E-88	11417974	NT	Homo sapiens transcobalamin II; macrocytic anemia (TCN2), mRNA
1013	13773	28432	3.32	2.0E-88	7305198	NT	Homo sapiens Caldesin, presenilin-binding protein, EIF hand transcription factor (CSEN), mRNA
1620	14367	27058	1.38	2.0E-88	AF246219.1	NT	Homo sapiens SNARE protein kinase SNAK mRNA, complete cds
1744	14486	27185	3.13	2.0E-88	AF246219.1	NT	Homo sapiens SNARE protein kinase SNAK mRNA, complete cds
3458	16214	28967	1.52	2.0E-88	AF246219.1	NT	Homo sapiens SNARE protein kinase SNAK mRNA, complete cds
4391	17128	29760	2.13	2.0E-88	5031866	NT	Homo sapiens dynein, axonemal, light polypeptide 4 (DNAL4), mRNA
5821	18610	31539	5.63	1.0E-88	AW139665.1	EST_HUMAN	U1-H-B11-see-4-04-0-UI.s1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2718750 3'
5821	18610	31540	5.63	1.0E-88	AW139665.1	EST_HUMAN	U1-H-B11-see-4-04-0-UI.s1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2718750 3'
6548	18313	32317	23.81	1.0E-88	AB007877.1	NT	Homo sapiens KIAA0417 mRNA, complete cds
6548	18313	32318	23.81	1.0E-88	AB007877.1	NT	Homo sapiens KIAA0417 mRNA, complete cds
7022	19714	32771	1.4	1.0E-88	A198034.1	EST_HUMAN	wq70r12x1 NCI_CGAP_GC8 Homo sapiens cDNA clone IMAGE:2478806 3'
7084	19774	32839	4.42	1.0E-88	AA488981.1	EST_HUMAN	sa44a11.s1 NCI_CGAP_GC8 Homo sapiens cDNA clone IMAGE:824732 3' similar to WP-B0272.2
9141	21872	35037	0.6	1.0E-88	AA190368.1	EST_HUMAN	zp37c02J1 Stratagene HeLa cell c3 837218 Homo sapiens cDNA clone IMAGE:627170 5' similar to SW:POL1_HUMAN P10288 RETROVIRUS-RELATED POL POLYPROTEIN ;
9478	22131	35311	2.97	1.0E-88	ALD43314.2	EST_HUMAN	DKFZp434N0323.J1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434N0323 5'
11422	23188	36420	2.99	1.0E-88	AA991479.1	EST_HUMAN	cs01g03.s1 NCI_CGAP_GC3 Homo sapiens cDNA clone IMAGE:1612766 3' similar to gb:M18342 HETEROGENEOUS NUCLEAR RIBONUCLEOPROTEINS C1/C2 (HUMAN);
12356	24760		3	1.0E-88	AL163249.2	NT	Homo sapiens chromosome 21 segment HS21C046

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2739	15445	28184	1.33	8.0E-89	BE311557.1	EST_HUMAN	601142408F1 NIH MGC_14 Homo sapiens cDNA clone IMAGE:3506186 5'
6833	19495	32519	1.2	8.0E-89	11421514	NT	Homo sapiens similar to serpin domain, immunoglobulin domain (Ig), short basic domain, secreted, (serpin) 3A (H. sapiens) (LOC83232), mRNA
424	13210	25856	1.72	7.0E-89	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
424	13210	25857	1.72	7.0E-89	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
4828	17559	30181	2.86	7.0E-89	4557300	NT	Homo sapiens complement component 8, beta polypeptide (C8B), mRNA
4878	17605	30228	3.35	7.0E-89	AL045748.1	EST_HUMAN	DKFZp434E246_r1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434E246 5'
5345	18148	30827	1.34	7.0E-89	X98832.1	NT	H. sapiens CLN3 gene, complete CDS
5345	18148	30828	1.34	7.0E-89	X98832.1	NT	H. sapiens CLN3 gene, complete CDS
6250	19024	31697	0.57	7.0E-89	7549808	NT	Homo sapiens plasmin 3 (T isoform) (PLS3), mRNA
6250	19024	31698	0.57	7.0E-89	7549808	NT	Homo sapiens plasmin 3 (T isoform) (PLS3), mRNA
7308	20076	33156	2.06	7.0E-89	11420764	NT	Homo sapiens actin related protein 2/3 complex, subunit 1A (41 kD) (ARPC1A), mRNA
7779	20474	33598	0.57	7.0E-89	11417118	NT	Homo sapiens KIAA0433 protein (KIAA0433), mRNA
7779	20474	33599	0.57	7.0E-89	11417118	NT	Homo sapiens KIAA0433 protein (KIAA0433), mRNA
8584	22237	35421	0.6	7.0E-89	AB011133.1	NT	Homo sapiens mRNA for KIAA0561 protein, partial cds
10429	23075	36206	1.11	7.0E-89	X62048.1	NT	H. sapiens Wee1 hu gene
10429	23075	36207	1.11	7.0E-89	X62048.1	NT	H. sapiens Wee1 hu gene
10445	23091	36320	2.33	7.0E-89	AB020630.1	NT	Homo sapiens mRNA for KIAA0823 protein, partial cds
10445	23091	36321	2.33	7.0E-89	AB020630.1	NT	Homo sapiens mRNA for KIAA0823 protein, partial cds
11203	23987	37154	1.45	7.0E-89	M59763.1	NT	Human aldose reductase (AR) gene, segment 2
12774	25026		1.7	7.0E-89	U87927.1	NT	Human acetylcholinesterase (ACO2) gene, exon 2
1002	13762	28423	0.73	6.0E-89	5803114	NT	Homo sapiens inner membrane protein, mitochondrial (mitofilin) (IMMT), mRNA
2210	14638	27076	1.27	6.0E-89	4506124	NT	Homo sapiens serine/threonine-protein kinase PRP4 homolog (PRP4) mRNA
2434	15155	27888	1.06	6.0E-89	4507788	NT	Homo sapiens ubiquitin-conjugating enzyme E2L 3 (UBE2L3) mRNA
2434	15155	27889	1.06	6.0E-89	4507788	NT	Homo sapiens ubiquitin-conjugating enzyme E2L 3 (UBE2L3) mRNA
3515	16271	28925	0.88	6.0E-89	7661817	NT	Homo sapiens HSPC159 protein (HSPC159), mRNA
4593	17328	29654	3.02	6.0E-89	AB007866.2	NT	Homo sapiens mRNA for KIAA0406 protein, partial cds
4593	17328	29655	3.02	6.0E-89	AB007866.2	NT	Homo sapiens mRNA for KIAA0406 protein, partial cds
5100	17819	30438	0.81	6.0E-89	6800618	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
5100	17819	30437	0.81	6.0E-89	6800618	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
5016	17737	30345	2.74	5.0E-89	BE244323.1	EST_HUMAN	TCBAP2E0383 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project-TCBA Homo sapiens cDNA clone TCBAP0383
5016	17737	30346	2.74	5.0E-89	BE244323.1	EST_HUMAN	TCBAP2E0383 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project-TCBA Homo sapiens cDNA clone TCBAP0383

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7487	20169	33251	1.95	4.0E-89	BE762749.1	EST_HUMAN	QV3-NT0022-080600-219-g03 NT0022 Homo sapiens cDNA
11088	23758	37034	1.66	4.0E-89	AI798872.1	EST_HUMAN	we91c03.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2348452 3'
2870	15846	28289	1.51	3.0E-89	AW978181.1	EST_HUMAN	EST388280 MAGE resequences, MAGN Homo sapiens cDNA
7040	19731	32760	1.28	3.0E-89	AI217359.1	EST_HUMAN	qh17b06.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1844915 3'
10502	23148	36374	0.48	3.0E-89	AB002297.1	NT	Human mRNA for KIAA0299 gene, partial cds
10702	23393	36630	2.34	3.0E-89	N57357.1	EST_HUMAN	yw66e11.1 Soares_placenta_8to9weeks_ZNBP86b8W Homo sapiens cDNA clone IMAGE:259148 5' similar to SW-PI4K_HUMAN P42356 PHOSPHATIDYLINOSITOL 4-KINASE ALPHA;
123	13184	25832	0.87	2.0E-89	7706870	NT	Homo sapiens PXR2b protein (PXR2b), mRNA
123	13184	25833	0.87	2.0E-89	7706870	NT	Homo sapiens PXR2b protein (PXR2b), mRNA
399	13184	25832	1.56	2.0E-89	7706870	NT	Homo sapiens PXR2b protein (PXR2b), mRNA
399	13184	25833	1.55	2.0E-89	7706870	NT	Homo sapiens PXR2b protein (PXR2b), mRNA
517	13301	25933	3.17	2.0E-89	AB037763.1	NT	Homo sapiens mRNA for KIAA1342 protein, partial cds
2893	16650	28293	1.53	2.0E-89	AJ22095.1	EST_HUMAN	gg96c08.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1843022 3' similar to gb:J04131
3540	16296	28946	1.01	2.0E-89	AA759149.1	EST_HUMAN	GAMMA-GLUTAMYLTRANSFERASE 1 PRECURSOR (HUMAN); contains Alu repetitive element;
3540	16296	28947	1.01	2.0E-89	AA759149.1	EST_HUMAN	ah70e03.s1 Soares_testis_NHT Homo sapiens cDNA clone 1320988 3'
4126	16887	29494	1.26	2.0E-89	AF089897.1	NT	Homo sapiens topoisomerase-related function protein (TRF4-2) mRNA, partial cds
4133	16875	29504	5.16	2.0E-89	X39742.1	NT	H.sapiens HCK gene for tyrosine kinases (PTK), exons 10-11
4133	16875	29505	5.16	2.0E-89	X39742.1	NT	H.sapiens HCK gene for tyrosine kinases (PTK), exons 10-11
4315	17054	29679	0.75	2.0E-89	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
4463	17199	29826	1.1	2.0E-89	AJ007378.1	NT	Homo sapiens GGT gene, exon 5
5258	18065	30886	0.66	2.0E-89	BE541744.1	EST_HUMAN	60106606F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3452423 5'
5383	18193	31418	2.9	2.0E-89	AB007546.1	NT	Homo sapiens gene for LECT2, complete cds
5702	18498	31418	1.61	2.0E-89	U03985.1	NT	Human N-ethylmaleimide-sensitive factor mRNA, partial cds
6116	18894	31861	0.63	2.0E-89	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
7567	20237	33341	5.33	2.0E-89	U81004.1	NT	Human GT24 (GT24) mRNA, partial cds
7635	20530	33657	3.07	2.0E-89	11428901	NT	Homo sapiens solute carrier family 24 (sodium/potassium/calcium exchanger), member 2 (SLC24A2), mRNA
8316	21009	34146	1.02	2.0E-89	AJ245503.1	NT	Homo sapiens partial mRNA for PEX5 related protein
9152	21863	36052	0.6	2.0E-89	AB037754.1	NT	Homo sapiens mRNA for KIAA1333 protein, partial cds
9710	22391	35557	0.68	2.0E-89	AF170814.1	NT	Homo sapiens CaBP5 (CaBP5) gene, exon 5
9710	22361	35558	0.68	2.0E-89	AF170814.1	NT	Homo sapiens CaBP5 (CaBP5) gene, exon 5

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11348	24038	37338	2.83	2.0E-89	11434411	NT	Homo sapiens integrin, alpha 3 (antigen CD49C, alpha 3 subunit of VLA-3 receptor) (ITGA3), mRNA
11448	23215	36447	2.3	2.0E-89	5729867	NT	Homo sapiens hec domain and RLD 2 (HERC2), mRNA
11562	24161	37472	5.03	2.0E-89	11433673	NT	Homo sapiens cell adhesion molecule with homology to L1CAM (close homologue of L1) (CHL1), mRNA
11718	24312	37636	2.11	2.0E-89	U10892.1	NT	Human IMAGE-7 antigen (IMAGE7) pseudogene, complete cds
11570	24169	37483	5.97	1.0E-89	BF198052.1	EST_HUMAN	h81d09.x1 NCL CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3134897 3' similar to TR:054778 054778
11570	24169	37484	5.97	1.0E-89	BF198052.1	EST_HUMAN	SOLUTE CARRIER FAMILY 22-LIKE 2 PROTEIN ;
8126	20820	33956	1.57	9.0E-90	AL163246.2	NT	SOLUTE CARRIER FAMILY 22-LIKE 2 PROTEIN ;
8126	20820	33957	1.57	9.0E-90	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
1041	13801	26459	2.23	8.0E-90	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
1042	13801	26459	2.9	8.0E-90	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
1307	15565	26731	3.78	8.0E-90	BE670561.1	EST_HUMAN	7e38f08.x1 NCL CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3284583 3'
1307	15565	26732	3.78	8.0E-90	BE670561.1	EST_HUMAN	7e38f08.x1 NCL CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3284583 3'
8458	21150	34293	0.55	8.0E-90	BE177830.1	EST_HUMAN	RC1-HT0568-120400-022-b08 HT0568 Homo sapiens cDNA
10599	23293	36531	1.52	8.0E-90	A1222095.1	EST_HUMAN	qg90c08.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1843022 3' similar to gb:J04131 GAMMA-GLUTAMYLTRANSPETIDASE 1 PRECURSOR (HUMAN); contains Alu repetitive element;
10599	23293	36532	1.52	8.0E-90	A1222095.1	EST_HUMAN	qg90c08.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1843022 3' similar to gb:J04131 GAMMA-GLUTAMYLTRANSPETIDASE 1 PRECURSOR (HUMAN); contains Alu repetitive element;
10963	23639	36889	1.32	8.0E-90	AA705222.1	EST_HUMAN	z182g10.x1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:401442 3'
10963	23639	36890	1.32	8.0E-90	AA705222.1	EST_HUMAN	z182g10.x1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:401442 3'
816	13587		4.12	7.0E-90	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CAGNATE) gene, exons 7-48, and partial cds, alternatively spliced
8323	21016		2.08	7.0E-90	AA782877.1	EST_HUMAN	al63d08.x1 Soares_testis_NHT Homo sapiens cDNA clone 1375503 3'
8965	21556	34701	1.62	7.0E-90	BE962525.2	EST_HUMAN	601655837R1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3855824 3'
8965	21556	34702	1.62	7.0E-90	BE962525.2	EST_HUMAN	601655837R1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3855824 3'
10036	22984	35001	1.9	7.0E-90	H68846.1	EST_HUMAN	y68a04.x1 Soares_fetal_liver_spleen_1NFLS Homo sapiens cDNA clone IMAGE:212190 3' similar to SP:C1TC_HUMAN P11586 C-1-TETRAHYDROFOLATE SYNTHASE, CYTOPLASMIC;
10036	22984	35002	1.9	7.0E-90	H68846.1	EST_HUMAN	y68a04.x1 Soares_fetal_liver_spleen_1NFLS Homo sapiens cDNA clone IMAGE:212190 3' similar to SP:C1TC_HUMAN P11586 C-1-TETRAHYDROFOLATE SYNTHASE, CYTOPLASMIC;

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10352	22998	36216	1.17	7.0E-00	BF520089.1	EST_HUMAN	602071208F1 NCL_CGAP_Bm64 Homo sapiens cDNA clone IMAGE:4214257 5'
4201	16942	29568	9.12	6.0E-00	8922398	NT	Homo sapiens hypothetical protein FLJ10388 (FLJ10388), mRNA
4201	16942	29569	9.12	6.0E-00	8922398	NT	Homo sapiens hypothetical protein FLJ10388 (FLJ10388), mRNA
5894	18679	31825	3.27	6.0E-00	U77700.1	NT	Homo sapiens HsGCN1 mRNA, partial cds
5894	18679	31826	3.27	6.0E-00	U77700.1	NT	Homo sapiens HsGCN1 mRNA, partial cds
8226	20919	34056	2.75	6.0E-00	4504794	NT	Homo sapiens inositol 1,4,5-trisphosphate receptor, type 3 (ITPR3) mRNA
8225	20919	34057	2.75	6.0E-00	4504794	NT	Homo sapiens inositol 1,4,5-trisphosphate receptor, type 3 (ITPR3) mRNA
161	12906		18.84	5.0E-00	AB036344.1	NT	Homo sapiens TOL8 gene, exon 1-10b
1170	13924	26586	3.08	5.0E-00	U80226.1	NT	Human gamma-aminobutyric acid transaminase mRNA, partial cds
1813	14553	27267	1.47	5.0E-00	A1222095.1	EST_HUMAN	q98c08.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1843022 3' similar to gb:J04131 GAMMA-GLUTAMYL-TRANSPEPTIDASE 1 PRECURSOR (HUMAN); contains Alu repetitive element
1813	14553	27268	1.47	5.0E-00	A1222095.1	EST_HUMAN	q98c08.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1843022 3' similar to gb:J04131 GAMMA-GLUTAMYL-TRANSPEPTIDASE 1 PRECURSOR (HUMAN); contains Alu repetitive element
2680	15274	28011	2.79	5.0E-00	AF114487.1	NT	Homo sapiens Intersectin long isoform (ITSN) mRNA, complete cds
4503	17238	28871	2.05	5.0E-00	4506354	NT	Homo sapiens pregnancy-zone protein (PZP) mRNA
4622	17357	29892	0.98	5.0E-00	AL135549.1	EST_HUMAN	DKFZp762P1616.1 762 (synonym: hme2) Homo sapiens cDNA clone DKFZp762P1616 5'
5504	18302	31203	2.94	5.0E-00	Z16411.1	NT	H. sapiens mRNA encoding phospholipase c
5606	18402	31316	1.31	5.0E-00	AB015617.1	NT	H. sapiens ELKS mRNA, complete cds
5679	18302	31203	2.36	5.0E-00	Z16411.1	NT	H. sapiens mRNA encoding phospholipase c
6631	16393	32407	0.74	5.0E-00	9910395	NT	Homo sapiens Carbonic anhydrase-related protein 10 (LOC568934), mRNA
6631	16393	32408	0.74	5.0E-00	9910395	NT	Homo sapiens Carbonic anhydrase-related protein 10 (LOC568934), mRNA
7114	19802	32866	2.04	5.0E-00	AF113708.1	NT	Homo sapiens angiotensin 4 (ANG4) mRNA, partial cds
7114	19802	32867	2.04	5.0E-00	AF113708.1	NT	Homo sapiens angiotensin 4 (ANG4) mRNA, partial cds
7463	20136	33228	9.01	5.0E-00	4557258	NT	Homo sapiens adenylate cyclase 9 (ADCY9) mRNA
7790	20485	33609	0.44	5.0E-00	4506758	NT	Homo sapiens ryanodine receptor 3 (RYR3) mRNA
8192	20886	34025	5.06	5.0E-00	11345483	NT	Homo sapiens hypothetical protein FLJ13222 (FLJ13222), mRNA
8096	21784	34950	0.56	5.0E-00	4826670	NT	Homo sapiens cadherin 18 (CDH18) mRNA
9579	22232	35416	1.06	5.0E-00	11419426	NT	Homo sapiens similar to ecdonucleotide pyrophosphatase/phosphodiesterase 3 (H. sapiens) (LOC83214), mRNA
10181	22820	36044	0.56	5.0E-00	AF123303.1	NT	Homo sapiens calcium-binding transporter mRNA, partial cds
10312	22959	36175	0.5	5.0E-00	11417118	NT	Homo sapiens KIAA0433 protein (KIAA0433), mRNA
10312	22959	36176	0.5	5.0E-00	11417118	NT	Homo sapiens KIAA0433 protein (KIAA0433), mRNA



Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10344	22891	36209	9.18	5.0E-90	11433721	NT	Homo sapiens ATPase, aminophospholipid transporter-like, Class I, type 8A, member 2 (ATP8A2), mRNA
10402	23048	36284	0.54	5.0E-90	7682051	NT	Homo sapiens KIAA0317 gene product (KIAA0317), mRNA
10402	23048	36285	0.54	5.0E-90	7682051	NT	Homo sapiens KIAA0317 gene product (KIAA0317), mRNA
11731	24324	37648	2.41	5.0E-90	7682047	NT	Homo sapiens KIAA0305 gene product (KIAA0305), mRNA
12591	24948		2.08	5.0E-90	AB011389.1	NT	Homo sapiens gene for AF-6, complete cds
12841	24938		4.43	5.0E-90	AI523366.1	EST_HUMAN	ar78h05.x1 Barstead sorta HP1R86 Homo sapiens cDNA clone IMAGE:2128761 3'
295	13101	25742	1.93	4.0E-90	AF231920.1	NT	Homo sapiens chromosome 21 unknown mRNA
295	13101	25743	1.93	4.0E-90	AF231920.1	NT	Homo sapiens chromosome 21 unknown mRNA
1064	13822	26482	3.26	4.0E-90	4505316	NT	Homo sapiens myosin phosphatase, target subunit 1 (MYPT1), mRNA
1684	14428	27125	8.09	4.0E-90	X99033.1	NT	H. sapiens gene encoding diacylglycerol receptor tyrosine kinase, exon 18
2892	15758	28405	0.98	4.0E-90	AF007544.1	NT	Homo sapiens prostate-specific membrane antigen (PSM) gene, complete cds
3023	15789	28436	1.07	4.0E-90	6808918	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
3023	15789	28437	1.07	4.0E-90	6808918	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
4908	17343	29075	7.65	4.0E-90	D87875.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
4743	17476	30109	2.17	4.0E-90	AB033070.1	NT	Homo sapiens mRNA for KIAA1244 protein, partial cds
4768	17800	30123	2.93	4.0E-90	MF5987.1	NT	Human prothrombin converting enzyme (NEC2) gene, exon 8
7751	20447	33570	1.08	3.0E-90	BF516168.1	EST_HUMAN	UIH-BW1-amy-b-04-Q-UI.s1 NCI_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3083839 3'
7751	20447	33571	1.08	3.0E-90	BF516168.1	EST_HUMAN	UIH-BW1-amy-b-04-Q-UI.s1 NCI_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3083839 3'
11630	24227	37551	17.81	3.0E-90	BE563833.1	EST_HUMAN	601335244F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3689147 5'
208	13020	26682	4.71	2.0E-90	BE537913.1	EST_HUMAN	601067378F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3453834 5'
1150	13905	26567	2.67	2.0E-90		NT	Homo sapiens high-mobility group (nonhistone chromosomal) protein 17 (HMG17), mRNA
1150	13905	26568	2.67	2.0E-90	5031748	NT	Homo sapiens high-mobility group (nonhistone chromosomal) protein 17 (HMG17), mRNA
3828	16577	29209	1.7	2.0E-90	AI138213.1	EST_HUMAN	qc54c02.x1 Soares, placenta, 8tcdweeks, 2N1HP86c9W Homo sapiens cDNA clone IMAGE:1713410 3'
4840	17374	30008	1.06	2.0E-90	AB008627.1	NT	similar to SW-OLF3_MOUSE P23275 OLFACTORY RECEPTOR OR3. ;
4853	17583	30208	7.31	2.0E-90	5729855	NT	Homo sapiens mRNA for KIAA0289 gene, partial cds
5895	18489	31410	4.86	2.0E-90	AW672686.1	EST_HUMAN	Homo sapiens GRB2-related adaptor protein (GRAP) mRNA
9889	22341	35534	4.78	2.0E-90		NT	ba49d05.y3 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2889881 5' similar to TR:O75208 O75208 HYPOTHETICAL 35.5 KD PROTEIN. ;
9889	22341	35535	4.78	2.0E-90	11427320	NT	Homo sapiens similar to laminin receptor 1 (87kD, ribosomal protein SA) (H. sapiens) (LOC83484), mRNA
9890	22510	35706	1.37	2.0E-90	11427320	NT	Homo sapiens similar to laminin receptor 1 (87kD, ribosomal protein SA) (H. sapiens) (LOC83484), mRNA
					AU118985.1	EST_HUMAN	AU118985 HEMBA1 Homo sapiens cDNA clone HEMBA1004795 5'

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9880	22510	35707	1.37	2.0E-90	AU118985.1	EST_HUMAN	AU118985 HEMBA1 Homo sapiens cDNA clone HEMBA1004795 5'
11447	23214	38448	2.8	2.0E-90	11024711	NT	Homo sapiens myosin, heavy polypeptide 4, skeletal muscle (MYH4), mRNA
270	13078	25720	4.55	1.0E-90	4502168	NT	Homo sapiens amyloid beta (A4) precursor protein (protease resistant), Alzheimer disease (APP), mRNA
365	15516	25805	1.36	1.0E-90	AF231920.1	NT	Homo sapiens chromosome 21 unknown mRNA
366	15516	25805	1.43	1.0E-90	AF231920.1	NT	Homo sapiens chromosome 21 unknown mRNA
678	13454	26098	2.32	1.0E-90	AJ237589.1	NT	Homo sapiens mRNA for T-box transcription factor (TBX20 gene), partial
679	13454	26098	2.32	1.0E-90	AJ237589.1	NT	Homo sapiens mRNA for T-box transcription factor (TBX20 gene), partial
713	13487	26137	13.22	1.0E-90	AF284750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
713	13487	26138	13.22	1.0E-90	AF284750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
1088	13846		2.47	1.0E-90	4507828	NT	Homo sapiens Kruppel-like factor 7 (ubiquitous) (KLF7), mRNA
1283	14033	26703	5.56	1.0E-90	AF098154.1	NT	Homo sapiens protein phosphatase 2A BR gamma subunit gene, exon 3
1283	14033	26704	5.56	1.0E-90	AF098154.1	NT	Homo sapiens protein phosphatase 2A BR gamma subunit gene, exon 3
1862	14408		1.23	1.0E-90	BE378884.1	EST_HUMAN	601189563F2 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3511118 5'
1895	14632	27342	3.33	1.0E-90	11420514	NT	Homo sapiens similar to SALL1 (see Drosophila)-like (LOC57187), mRNA
2658	15626	28271	6.46	1.0E-90	6005720	NT	Homo sapiens soluble interleukin 1 receptor accessory protein (IL1RAP) gene, exon 8, alternative exons 9 and complete cds, alternatively spliced
4388	17126	28758	1.29	1.0E-90	AF167340.1	NT	Homo sapiens mRNA for KIAA0633 protein, partial cds
5589	18385	31295	2.58	1.0E-90	AB014533.1	NT	Homo sapiens KIAA0623 gene product (KIAA0623), mRNA
5748	18538	31460	0.96	1.0E-90	11428910	NT	Homo sapiens cytochrome P450, 51 (liposterol 14-alpha-demethylase) (CYP51), mRNA
6473	19240	32240	0.57	1.0E-90	11419408	NT	Human retina-derived POU-domain factor-1 mRNA, complete cds
6973	19455	32475	0.66	1.0E-90	U91934.1	NT	Homo sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 2A (GRIN2A) mRNA
7204	19889	32985	0.64	1.0E-90	6006002	NT	Homo sapiens solute carrier family 1 (high affinity aspartate/glutamate transporter), member 6 (SLC1A6), mRNA
7571	20240	33345	2.77	1.0E-90	11420758	NT	Homo sapiens brefeldin A-inhibited guanine nucleotide-exchange protein 2 (BIG2), mRNA
8720	21412	34555	3.73	1.0E-90	11422086	NT	Homo sapiens SNCA isoform (SNCA) gene, complete cds, alternatively spliced
9183	21863		0.96	1.0E-90	AF163864.1	NT	Homo sapiens CGI-15 protein (LOC51006), mRNA
9215	21894	35092	1.53	1.0E-90	11422109	NT	Homo sapiens CGI-16 protein (LOC51009), mRNA
9215	21894	35093	1.63	1.0E-90	11422109	NT	Homo sapiens CGI-16 protein (LOC51009), mRNA
10657	23253	36490	1.5	1.0E-90	R25886.1	EST_HUMAN	Y044d11 J2 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:35477 5'
10987	23643	36896	1.76	1.0E-90	J04474.1	NT	Human branched chain alpha-keto acid dehydrogenase mRNA, 3' end
12580	24904	31001	1.49	1.0E-90	AB002059.1	NT	Homo sapiens DNA for Human P2XM, complete cds
12680	24904	31002	1.49	1.0E-90	AB002059.1	NT	Homo sapiens DNA for Human P2XM, complete cds
4172	18912	20642	6	8.0E-91	D12234.1	EST_HUMAN	HUM000381 Liver HepG2 cell line. Homo sapiens cDNA clone s381 3'

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1427	14174	28869	1.06	7.0E-01	AF053768.1	NT	Rattus norvegicus brain specific cortactin-binding protein CBP90 mRNA, partial cds
8205	20899	34036	1.8	7.0E-01	11419234	NT	Homo sapiens meloth, ring finger protein, 1 (MKRN1), mRNA
10198	22846	36062	0.68	7.0E-01	AB04151.1	EST_HUMAN	CM-BT043-090298-075 BT043 Homo sapiens cDNA
3467	19223	28877	1.93	5.0E-01	AA702794.1	EST_HUMAN	280604.s1 Soares_fetal_liver_spleen_1NLS_S1 Homo sapiens cDNA clone IMAGE:448015 3'
4480	17215	29840	11.73	5.0E-01	AU143539.1	EST_HUMAN	AU143539 Y79AA1 Homo sapiens cDNA clone Y79AA1002087 5'
4480	17215	29841	11.73	5.0E-01	AU143539.1	EST_HUMAN	AU143539 Y79AA1 Homo sapiens cDNA clone Y79AA1002087 5'
4757	17489	30116	0.97	5.0E-01	7110634	NT	Homo sapiens chromosome 22 open reading frame 5 (C22ORF5), mRNA
4757	17489	30117	0.97	5.0E-01	7110634	NT	Homo sapiens chromosome 22 open reading frame 5 (C22ORF5), mRNA
6519	19285	32289	1.25	5.0E-01	AI879896.1	EST_HUMAN	eu4090.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2518121 3' similar to SW-ASPG_FLAME Q47898 N4-(BETA-N-ACETYLGLUCOSAMINYL)-L-ASPARAGINASE PRECURSOR ;
8105	20799	33931	1.2	5.0E-01	BF314882.1	EST_HUMAN	801901624FT1NH_MGC_19 Homo sapiens cDNA clone IMAGE:4130833 5'
8958	21350	34495	1.52	5.0E-01	AV649878.1	EST_HUMAN	AV649878 GLC Homo sapiens cDNA clone GLOBYF08 3'
8958	21350	34498	1.52	5.0E-01	AV649878.1	EST_HUMAN	AV649878 GLC Homo sapiens cDNA clone GLOBYF08 3'
12612	24919		1.74	5.0E-01	AI193566.1	EST_HUMAN	9e70H1.x1 Soares_fetal_lung_NbHL10W Homo sapiens cDNA clone IMAGE:1744385 3' similar to cortactin
3197	15960	28611	1.99	4.0E-01	AF156778.1	NT	MIR.b2 MIR repetitive element;
3197	15960	28612	1.99	4.0E-01	AF156778.1	NT	Homo sapiens lysophosphatidic acid acyltransferase-delta (LPAAT-delta) mRNA, complete cds
10948	23630	36775	4.49	4.0E-01	AL163284.2	NT	Homo sapiens lysophosphatidic acid acyltransferase-delta (LPAAT-delta) mRNA, complete cds
12084	24596	31082	1.88	4.0E-01	MT7894.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C084
12084	24596	31127	1.98	4.0E-01	MT7894.1	EST_HUMAN	EST01579 Hippocampus, Striatum (cat. #836205) Homo sapiens cDNA clone HHCMC80 similar to
1613	14380	27049	3.07	3.0E-01	11430183	NT	Retrovirus-related gag polyprotein
1913	14380	27050	3.07	3.0E-01	11430183	NT	EST01579 Hippocampus, Striatum (cat. #836205) Homo sapiens cDNA clone HHCMC80 similar to
3334	16094	28746	1.62	3.0E-01	AL163283.2	NT	Retrovirus-related gag polyprotein
3455	16211	28863	3.39	3.0E-01	AB033104.1	NT	Homo sapiens solute carrier family 4, anion exchanger, member 3 (SLC4A3), mRNA
3455	16211	28864	3.39	3.0E-01	AB033104.1	NT	Homo sapiens solute carrier family 4, anion exchanger, member 3 (SLC4A3), mRNA
3768	16520	29159	1.45	3.0E-01	AF084630.1	NT	Homo sapiens chromosome 21 segment HS21C083
4551	17286	29915	3.79	3.0E-01	MS0638.1	NT	Homo sapiens mRNA for KIAA1278 protein, partial cds
5600	18395	31305	1.27	3.0E-01	11434964	NT	Homo sapiens mRNA for KIAA1278 protein, partial cds
6212	18987		2.48	3.0E-01	4502740	NT	Homo sapiens cyclin-D binding Myb-like protein mRNA, complete cds
6488	19255	32258	5.82	3.0E-01	11497611	NT	Human Ku (p70/p80) subunit mRNA, complete cds
							Homo sapiens epidermal secretory protein (19.5kD) (HE1), mRNA
							Homo sapiens cyclin-dependent kinase 6 (CDK6) mRNA
							Homo sapiens gamma-aminobutyric acid (GABA) B receptor, 1 (GABBR1), transcript variant 2, mRNA

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6488	19255	32257	5.82	3.0E-01	11497011	NT	Homo sapiens gamma-aminobutyric acid (GABA) B receptor, 1 (GABBR1), transcript variant 2, mRNA
7538	20208	33308	4.97	3.0E-01	U89050.1	NT	Human L-type calcium channel beta-1 subunit (CACNLB1) gene, exons 10 and 11
7538	20208	33307	4.97	3.0E-01	U89050.1	NT	Human L-type calcium channel beta-1 subunit (CACNLB1) gene, exons 10 and 11
8609	21361	34508	2.58	3.0E-01	D16494.1	NT	Human mRNA for very low density lipoprotein receptor, complete cds
9188	21858	35023	2.83	3.0E-01	AB011168.1	NT	Homo sapiens mRNA for KIAA0694 protein, partial cds
10803	23498	36723	1.41	3.0E-01	AB032179.2	NT	Homo sapiens EHM2 mRNA, complete cds
11160	23827	37105	1.66	3.0E-01	AB029003.1	NT	Homo sapiens mRNA for KIAA1080 protein, partial cds
11160	23827	37108	1.66	3.0E-01	AB029003.1	NT	Homo sapiens mRNA for KIAA1080 protein, partial cds
12335	24749	31067	2	3.0E-01	AF240786.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
12667	17898	30489	4.35	3.0E-01	AF169555.1	NT	Homo sapiens beta-ureidopropionase (BUP1) gene, exon 8
12667	17898	30490	4.35	3.0E-01	AF169555.1	NT	Homo sapiens beta-ureidopropionase (BUP1) gene, exon 8
47	12876	25601	5.06	1.0E-01	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
1223	13973	26645	6.31	1.0E-01	AW449746.1	EST_HUMAN	UIH-B13-eks-d-01-Q-J1.s1 NCI_CGAP_Sub5 Homo sapiens cDNA clone IMAGE:2735280 3'
5328	18131	30790	0.97	1.0E-01	11434402	NT	Homo sapiens hypothetical protein PRO1855 (PRO1855), mRNA
6743	19577	32610	2.26	1.0E-01	BF348182.1	EST_HUMAN	602022088F1 NCI_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4157804 5'
6743	19577	32611	2.26	1.0E-01	BF348182.1	EST_HUMAN	602022088F1 NCI_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4157804 5'
12245	25340		1.36	1.0E-01	H15212.1	EST_HUMAN	ym30e03.r1 Soares infant brain 1NB Homo sapiens cDNA clone IMAGE:49587 5'
1219	13970	26639	9.06	9.0E-02	AJ001680.1	NT	Homo sapiens NKGD2 gene, exon 10
1219	13970	26640	9.06	9.0E-02	AJ001689.1	NT	Homo sapiens NKGD2 gene, exon 10
5120	17838	30454	0.9	9.0E-02	AB020640.1	NT	Homo sapiens mRNA for KIAA0833 protein, partial cds
5376	18176	30867	4.86	9.0E-02	J03007.1	NT	Human Na <sup>+</sup> K <sup>+</sup> ATPase alpha-subunit mRNA, partial cds
5518	18316	31217	2.83	9.0E-02	11427149	NT	Homo sapiens hypothetical protein FLJ20260 (FLJ20260), mRNA
6362	19132	32127	4.03	9.0E-02	AF310105.1	NT	Homo sapiens NALP1 mRNA, complete cds
7756	20452	33576	7.17	9.0E-02	AJ250586.1	NT	Homo sapiens partial TM4SF2 gene for tetraspanin protein, exon 5
7756	20452	33577	7.17	9.0E-02	AJ250586.1	NT	Homo sapiens partial TM4SF2 gene for tetraspanin protein, exon 5
8272	20966	34107	0.92	9.0E-02	AB040945.1	NT	Homo sapiens mRNA for KIAA1512 protein, partial cds
8272	20966	34108	0.92	9.0E-02	AB040945.1	NT	Homo sapiens mRNA for KIAA1512 protein, partial cds
9174	21844	35010	1.95	9.0E-02	11422086	NT	Homo sapiens Brefeldin A-inhibited guanine nucleotide-exchange protein 2 (BIG2), mRNA
11161	23828		1.95	9.0E-02	7706888	NT	Homo sapiens RN86 (RN86), mRNA
91	12917	25554	2.25	8.0E-02	W26367.1	EST_HUMAN	26f3 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA
279	13086	25728	3.29	8.0E-02	BE386363.1	EST_HUMAN	601273513F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3614687 5'

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5041	17780	30374	0.06	8.0E-02	AW157571.1	EST_HUMAN	eu83h08.x1 Schriber fetal brain 00004 Homo sapiens cDNA clone IMAGE:2782911 3' similar to
5308	18113	30771	0.85	8.0E-02	AB048820.1	NT	TR:060302 O60302 KIAA0555 PROTEIN, contains element MER22 repetitive element;
							Homo sapiens mRNA for KIAA1600 protein, partial cds
							Homo sapiens FYVE domain-containing dual specificity protein phosphatase FYVE-DSP2 mRNA, complete
							cds
5411	18210	30918	0.97	8.0E-02	AF264717.1	NT	Homo sapiens MCP-4 gene
6451	19219	32217	1.31	8.0E-02	AJ000979.1	NT	Homo sapiens DNA polymerase zeta catalytic subunit variant 1 (REV3L) mRNA, complete cds
6455	19223	32222	0.92	8.0E-02	AF179428.1	NT	Homo sapiens DNA polymerase zeta catalytic subunit variant 1 (REV3L) mRNA, complete cds
7980	20685		0.55	8.0E-02	11416961	NT	Homo sapiens AIM-1 protein (LOC51151), mRNA
8324	21017	34152	3.91	8.0E-02	L04193.1	NT	Human lens membrane protein (mp19) gene, exon 11
8324	21017	34153	3.91	8.0E-02	L04193.1	NT	Human lens membrane protein (mp19) gene, exon 11
8422	21115	34253	0.58	8.0E-02	11428569	NT	Homo sapiens transcription termination factor, RNA polymerase II (TTF2), mRNA
8900	21651	34801	2.82	8.0E-02	AB014511.1	NT	Homo sapiens mRNA for KIAA0611 protein, partial cds
9925	22573	35771	1.18	8.0E-02	Y13829.1	NT	Homo sapiens mRNA for MBNL protein
10707	23397	36838	3.2	8.0E-02	AF074393.1	NT	Homo sapiens nuclear mitogen- and stress-activated protein kinase-1 (MSK1) mRNA, complete cds
							Homo sapiens dihydrolipoamide S-succinyltransferase (E2 component of 2-oxo-glutarate complex) (DLST)
							mRNA
11333	24024	37329	1.81	8.0E-02	4503340	NT	Homo sapiens DNA, MHC class I region, 7.1 ancestral haplotype
23	12851	25466	1.82	7.0E-02	AB031007.1	NT	Human von Willebrand factor pseudogene corresponding to exons 23 through 34
64	12892	25525	1.01	7.0E-02	M60876.1	NT	Homo sapiens mRNA for KIAA0759 protein, partial cds
230	15538	25680	0.87	7.0E-02	AB018301.1	NT	Homo sapiens mRNA for KIAA0759 protein, partial cds
230	15538	25681	0.87	7.0E-02	AB018301.1	NT	Homo sapiens cytoplasmic Seprase truncated isoform mRNA, complete cds
577	13357		1.34	7.0E-02	AF007822.1	NT	Homo sapiens cytoplasmic Seprase truncated isoform mRNA, complete cds
1257	14006	26675	1.89	7.0E-02	4502384	NT	Homo sapiens B-cell CLL/lymphoma 7b (BCL7B) mRNA
2184	14913	27645	2.27	7.0E-02	5031570	NT	Homo sapiens ARP2 (actin-related protein 2, yeast) homolog (ACTR2), mRNA
2184	14913	27646	2.27	7.0E-02	5031570	NT	Homo sapiens ARP2 (actin-related protein 2, yeast) homolog (ACTR2), mRNA
2568	15282	28020	1.46	7.0E-02	AF167706.1	NT	Homo sapiens cysteine-rich repeat-containing protein S52 precursor, mRNA, complete cds
2728	15435	28171	2.2	7.0E-02	6005738	NT	Homo sapiens NRAS-related gene (D1S155E), mRNA
2728	15435	28171	2.2	7.0E-02	6005738	NT	Homo sapiens NRAS-related gene (D1S155E), mRNA
2757	15462	28205	1.23	7.0E-02	AB031007.1	NT	Homo sapiens DNA, MHC class I region, 7.1 ancestral haplotype
3340	17877	28750	1.06	7.0E-02	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
3340	17877	28751	1.06	7.0E-02	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
							N-CAM=145 kDa neural cell adhesion molecule [human, small cell lung cancer cell line OS2-R, mRNA, 2880
							nt]
4547	17282	28912	2.59	7.0E-02	ST1824.1	NT	N-CAM=145 kDa neural cell adhesion molecule [human, small cell lung cancer cell line OS2-R, mRNA, 2880
4547	17282	28913	2.59	7.0E-02	ST1824.1	NT	N-CAM=145 kDa neural cell adhesion molecule [human, small cell lung cancer cell line OS2-R, mRNA, 2880
							nt]

Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4944	17671	30280	0.88	7.0E-02	AL163281.2	NT	Homo sapiens chromosome 21 segment HS21C081
5180	17989	30504	6.05	7.0E-02	AA446206.1	EST_HUMAN	z968d12.1 Sources testis_NHT Homo sapiens cDNA clone IMAGE:781175 5'
1592	14328		1.28	5.0E-02	BE300882.1	EST_HUMAN	601263012F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3605018 5'
2768	15473	28215	1.6	3.0E-02	BE909714.1	EST_HUMAN	601501242F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3602839 5'
5786	18577	31508	2.6	3.0E-02	AA378338.1	EST_HUMAN	EST01020 Synovial sarcoma Homo sapiens cDNA 5' end similar to similar to ribosomal protein S13
10664	23355	36594	2.72	3.0E-02	X15804.1	NT	Human mRNA for alpha-actinin
10664	23355	36595	2.72	3.0E-02	X15804.1	NT	Human mRNA for alpha-actinin
24	12852	25467	1.66	2.0E-02	4501808	NT	Homo sapiens activin A receptor, type IIB (ACVR2B) mRNA
174	12988	25625	3.57	2.0E-02	11422948	NT	Homo sapiens hypothetical protein DJ462023.2 (DJ462023.2), mRNA
174	12986	25626	3.57	2.0E-02	11422946	NT	Homo sapiens hypothetical protein DJ462023.2 (DJ462023.2), mRNA
732	13508	26162	1.33	2.0E-02	BE298190.1	EST_HUMAN	601118337F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3028304 5'
732	13508	26163	1.33	2.0E-02	BE298190.1	EST_HUMAN	601118337F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3028304 5'
1709	14452		2.22	2.0E-02	S78653.1	NT	mitogen-activated protein kinase-related [human, Genomic, 2416 nt]
1929	14665	27378	2.36	2.0E-02	AI818119.1	EST_HUMAN	Wk27d07.x1 NCI CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2413649 3' similar to TR:Q12844
1929	14665	27379	2.36	2.0E-02	AI818119.1	EST_HUMAN	Q12844 BREAKPOINT CLUSTER REGION PROTEIN ;
2041	14776	27504	5.58	2.0E-02	4506860	NT	Wk27d07.x1 NCI CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2413549 3' similar to TR:Q12844
2064	16374	28113	19.2	2.0E-02	8912457	NT	Q12844 BREAKPOINT CLUSTER REGION PROTEIN ;
3600	16353	28992	2.61	2.0E-02	AF231919.1	NT	Homo sapiens syndecan 4 (amphiglycan, ryudocan) (SDC4) mRNA
3600	16353	28993	2.61	2.0E-02	AF231919.1	NT	Homo sapiens calcineurin binding protein 1 (KJAA0330), mRNA
3674	16427	29068	5.57	2.0E-02	5903180	NT	Homo sapiens chromosome 21 unknown mRNA
4256	16997	29628	1.23	2.0E-02	M10976.1	NT	Homo sapiens stress-induced-phosphoprotein 1 (Hsp70/Hsp80-organizing protein) (STP1), mRNA
4636	17864		2.51	2.0E-02	AL040437.1	EST_HUMAN	Human endogenous retroviral DNA (4-1), complete retroviral segment
5673	18468	31363	0.84	2.0E-02	AF016535.1	NT	DKFZp434O0414.1_1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434O0414 5'
6209	18984		0.6	2.0E-02	4504758	NT	Homo sapiens P-glycoprotein (mdr1) mRNA, complete cds
6517	19282	32286	3.03	2.0E-02	AB028891.1	NT	Homo sapiens Integrin, alpha L (antigen CD11A (p180), lymphocyte function-associated antigen 1; alpha polypeptide) (ITGAL) mRNA
7364	20045		0.61	2.0E-02	U67780.1	NT	Homo sapiens mRNA for KIAA1068 protein, partial cds
7387	20045		0.78	2.0E-02	U67780.1	NT	Human NPY Y1-like receptor pseudogene mRNA, complete cds
8754	21446	34584	1.69	2.0E-02	AW340174.1	EST_HUMAN	Human NPY Y1-like receptor pseudogene mRNA, complete cds
10659	23350	36587	4.83	2.0E-02	11434900	NT	hcd0202.x1 Sources_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2908371 3' similar to TR:O02711
							O02711 PRO-POLYDUTPASE POLYPROTEIN ;
							Homo sapiens thyroid stimulating hormone receptor (TSHR), mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10930	23610	36859	1.48	2.0E-02	11434759	NT	Homo sapiens zinc finger protein 198 (ZNF198), mRNA
10978	23653	36906	2.54	2.0E-02	5803103	NT	Homo sapiens male-specific lethal-3 (Drosophila)-like 1 (MSL3L1), mRNA
12439	24809	31048	2.89	2.0E-02	AB023016.1	NT	Homo sapiens mRNA for KIAA1093 protein, partial cds
12687	15374	28113	2.51	2.0E-02	6912457	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
1842	14580	27294	1.13	1.0E-02	R78078.1	EST_HUMAN	y80a08.r1 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:145574 5'
1842	14580	27295	1.13	1.0E-02	R78078.1	EST_HUMAN	y80a08.r1 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:145574 5'
2068	14788	27525	8.83	1.0E-02	4508688	NT	Homo sapiens ribosomal protein, large, P1 (RPLP1), mRNA
8145	20839	33971	1.29	1.0E-02	BE439525.1	EST_HUMAN	HTM1-288F HTM1 Homo sapiens cDNA
							tg01602.x1 NCL_CGAP_CLL1 Homo sapiens cDNA clone IMAGE:2107467 3' similar to SW:PTNF_HUMAN
9062	21751	34910	3.82	1.0E-02	A1380356.1	EST_HUMAN	Q16825 PROTEIN-TYROSINE PHOSPHATASE D1; contains Alu repetitive element; contains element
							MER17 repetitive element;
9062	21751	34911	3.82	1.0E-02	A1380356.1	EST_HUMAN	tg01602.x1 NCL_CGAP_CLL1 Homo sapiens cDNA clone IMAGE:2107467 3' similar to SW:PTNF_HUMAN
2023	14768	27487	3	9.0E-03	AU121681.1	EST_HUMAN	Q16825 PROTEIN-TYROSINE PHOSPHATASE D1; contains Alu repetitive element; contains element
							MER17 repetitive element;
2035	14770		5.48	9.0E-03	AA316723.1	EST_HUMAN	AU121681 MAMMA1 Homo sapiens cDNA clone MAMMA1000738 5'
							EST168414 HCC cell line (metastasis to liver in mouse) II Homo sapiens cDNA 5' end similar to ribosomal protein L29
							Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
2653	16363		1.45	9.0E-03	AF223391.1	NT	801281867F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:36038832 5'
3602	16356	28995	1.11	9.0E-03	BE368571.1	EST_HUMAN	Homo sapiens ribosomal protein L10a (RPL10A), mRNA
11645	24242		9.71	9.0E-03	11418528	NT	U1H-B10-est-h-06-0-U1.s1 NCL_CGAP_Sub1 Homo sapiens cDNA clone IMAGE:2708371 3'
6351	19121	32112	0.58	8.0E-03	AW014042.1	EST_HUMAN	U1H-B10-est-h-06-0-U1.s1 NCL_CGAP_Sub1 Homo sapiens cDNA clone IMAGE:2708371 3'
6351	19121	32113	0.58	8.0E-03	AW014042.1	EST_HUMAN	U1H-B10-est-h-06-0-U1.s1 NCL_CGAP_Sub1 Homo sapiens cDNA clone IMAGE:2708371 3'
6496	19282	32263	2.51	8.0E-03	BF036564.1	EST_HUMAN	601490521F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3603908 5'
239	13048	25687	9.92	7.0E-03	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
3073	18639	28482	0.94	8.0E-03	11526176	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1), mRNA
6581	19344	32395	1.02	6.0E-03	AB033093.1	NT	Homo sapiens mRNA for KIAA1287 protein, partial cds
6817	19478	32501	1.12	6.0E-03	AF095771.1	NT	Homo sapiens PTH-responsive osteocalcin B1 protein (B1) mRNA, complete cds
1359	14107	28782	3.51	5.0E-03	AB014611.1	NT	Homo sapiens mRNA for KIAA0611 protein, partial cds
1386	14133	26807	7.28	5.0E-03	A1674184.1	EST_HUMAN	wc09c08.x1 NCL_CGAP_Pt28 Homo sapiens cDNA clone IMAGE:2314670 3'
1386	14133	26808	7.28	5.0E-03	A1674184.1	EST_HUMAN	wc09c08.x1 NCL_CGAP_Pt28 Homo sapiens cDNA clone IMAGE:2314670 3'
3227	15990	28843	2.98	5.0E-03	X04201.1	NT	Human skeletal muscle 1.3 kb mRNA for tropomyosin
5710	18503	31425	1.01	5.0E-03	M22878.1	NT	Human somatic cytochrome c (HC1) processed pseudogene, complete cds

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6018	18739		1.02	5.0E-03	AF045555.1	NT	Homo sapiens whear1 (WBSOR1) and whear5 (WBSOR5) genes, complete cds, alternatively spliced and replication factor C subunit 2 (RFC2) gene, complete cds
7814	20280	33388	3.8	5.0E-03	AF067436.1	NT	Homo sapiens protein phosphatase-1 regulatory subunit 7 (PPP1R7) gene, exon 11, complete cds and alternatively spliced product
8503	21185	34338	1	5.0E-03	4557528	NT	Homo sapiens discs, large (Drosophila) homolog 2 (chapsyn-110) (DLG2) mRNA
8503	21185	34339	1	5.0E-03	4557528	NT	Homo sapiens discs, large (Drosophila) homolog 2 (chapsyn-110) (DLG2) mRNA
9623	22176	35360	2.16	5.0E-03	AF274863.1	NT	Homo sapiens secretory pathway component Sec31B-1 mRNA, alternatively spliced, complete cds
9707	22358	35554	1.25	5.0E-03	6032156	NT	Homo sapiens TAR (HIV) RNA-binding protein 1 (TARBP1) mRNA
9970	22618	35821	1.9	5.0E-03	AF069313.2	NT	Homo sapiens WSB1 protein (WSB1) mRNA, complete cds
10727	23415	36666	2.25	5.0E-03	11438589	NT	Homo sapiens nucleobindin 2 (NUGB2) mRNA
12343	25052	30859	2.15	5.0E-03	11417877	NT	Homo sapiens gamma-glutamyltransferase 1 (GGT1), mRNA
12805	25052	30859	1.44	5.0E-03	11417877	NT	Homo sapiens gamma-glutamyltransferase 1 (GGT1), mRNA
86	12812		0.52	4.0E-03	AA459833.1	EST_HUMAN	z550e09.e1 Soares, testis, NHT Homo sapiens cDNA clone IMAGE:795688 3' similar to SW:CLPA_RAT
432	13218	25863	1.39	4.0E-03	4557879	NT	P37397 CALPONIN, ACIDIC ISOFORM ;
432	13218	25864	1.39	4.0E-03	4557879	NT	Homo sapiens interferon gamma receptor 1 (IFNGR1) mRNA
755	13527	26188	1.67	4.0E-03	7657454	NT	Homo sapiens interferon gamma receptor 1 (IFNGR1) mRNA
755	13527	26187	1.67	4.0E-03	7657454	NT	Homo sapiens pascadillo (zabrafish) homolog 1, containing BRCT domain (PES1), mRNA
1160	13914	26577	1.53	4.0E-03	8923658	NT	Homo sapiens pascadillo (zabrafish) homolog 1, containing BRCT domain (PES1), mRNA
1970	14709	27424	4.3	4.0E-03	AF047677.1	NT	Homo sapiens dysostrophin (DMD) gene, deletion breakpoints 1-3 in Intron 5
2241	14809	27707	0.98	4.0E-03	AF157478.1	NT	Homo sapiens DNA polymerase zeta catalytic subunit (REV3) mRNA, complete cds
2397	15118	27855	1.65	4.0E-03	AL163301.2	NT	Homo sapiens chromosome 21 segment HS21C101
3553	16308	28958	0.73	4.0E-03	7705396	NT	Homo sapiens tumor antigen SLP-6p (HCC8), mRNA
4026	16771	29403	1.67	4.0E-03	4504654	NT	Homo sapiens interleukin 18 receptor 1 (IL18R1) mRNA
5557	18354	31284	4.9	4.0E-03	T40894.1	EST_HUMAN	y694c12.r1 Stratagene liver (8937224) Homo sapiens cDNA clone IMAGE:78838 5' similar to similar to SP:A44391 A44391 SERUM RESPONSE ELEMENT-BINDING PROTEIN SRE-ZBP - HUMAN ,
11078	23748	37023	6.17	4.0E-03	AF082051.1	EST_HUMAN	AV082051 GK Homo sapiens cDNA clone GKCDRF07 5'
3843	16396	29035	7.35	3.0E-03	BF090630.1	EST_HUMAN	602246554F1 NIH_MGC_62 Homo sapiens cDNA clone IMAGE:4332036 5'
3843	16396	29036	7.35	3.0E-03	BF090630.1	EST_HUMAN	602246554F1 NIH_MGC_62 Homo sapiens cDNA clone IMAGE:4332036 5'
4210	16851		1.31	3.0E-03	AF225898.1	NT	Homo sapiens tensin mRNA, complete cds
5997	18491	31412	0.79	3.0E-03	AI553863.1	EST_HUMAN	tn29g03.x1 NCI_CGAP_Bm26 Homo sapiens cDNA clone IMAGE:2169076 3'
5997	18491	31413	0.79	3.0E-03	AI553863.1	EST_HUMAN	tn29g03.x1 NCI_CGAP_Bm26 Homo sapiens cDNA clone IMAGE:2169076 3'



Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6488	19235	32236	1.21	3.0E-03	11426182	NT	Homo sapiens GGN5 (general control of amino-acid synthesis, yeast, homolog)-like 2 (GCN5L2), mRNA
10703	23394	36631	4.27	3.0E-03	A1824829.1	EST_HUMAN	W602405.x1 NCL_CGAP_G08 Homo sapiens cDNA clone IMAGE:2304488 3'
185	12898	25637	7.61	2.0E-03	AB016810.1	NT	Chlorocebus aethiops mRNA for ribosomal protein S4X, complete cds
185	12898	25638	7.51	2.0E-03	AB016810.1	NT	Chlorocebus aethiops mRNA for ribosomal protein S4X, complete cds
315	13119	25758	9.36	2.0E-03	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
316	13119	25758	9.48	2.0E-03	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
1810	14357	27048	1.33	2.0E-03	AF225896.1	NT	Homo sapiens tansin mRNA, complete cds
2128	14857	27587	1.33	2.0E-03	U40783.1	NT	Human Ck-associated RS cyclophilin CARS-Cyp mRNA, complete cds
2490	15207	27949	1.86	2.0E-03	BE262882.1	EST_HUMAN	60117586F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3358220 5'
5332	18135	30794	5.42	2.0E-03	AW984385.1	EST_HUMAN	EST376458 MAGE resequences, MAGE Homo sapiens cDNA
5342	18145	30824	0.86	2.0E-03	47588153	NT	Homo sapiens deafness, autosomal dominant 5 (DFNA5), mRNA
5455	18254	31256	1.04	2.0E-03	BF351459.1	EST_HUMAN	QV3-HT0513-290300-128-H04 HT0513 Homo sapiens cDNA
5550	18347	31256	1.13	2.0E-03	11430039	NT	Homo sapiens hypothetical protein (LOC51318), mRNA
5595	18362	31270	0.85	2.0E-03	U74313.1	EST_HUMAN	HSU74313 Human chromosome 14 Homo sapiens cDNA clone 1-86
6584	19347	36946	1.1	2.0E-03	AW502002.1	EST_HUMAN	ULHF-BN0-aka-g-98-UJ1 NIH_MGC_60 Homo sapiens cDNA clone IMAGE:3078329 5'
11014	23686	36947	1.27	2.0E-03	AV721848.1	EST_HUMAN	AV721848 HTB Homo sapiens cDNA clone HTBAUB04 5'
11014	23686	36947	1.27	2.0E-03	AV721848.1	EST_HUMAN	AV721848 HTB Homo sapiens cDNA clone HTBAUB04 5'
12333	24686		2.94	2.0E-03	AA128735.1	EST_HUMAN	z29c10.s1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:503346 3'
12314	24736		2.17	2.0E-03	L41825.1	NT	Homo sapiens CYP17 gene, 5' end
12571	24886		10.79	2.0E-03	BF035327.1	EST_HUMAN	601438331F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3882088 5'
101	12927	25564	2.29	1.0E-03	AF238997.1	NT	Homo sapiens CTR1 pseudogene
101	12927	25566	2.29	1.0E-03	AF238997.1	NT	Homo sapiens CTR1 pseudogene
505	13289	25923	4.25	1.0E-03	7057016	NT	Homo sapiens hypothetical protein (DJ328E19.C1.1), mRNA
588	13386	25994	4.57	1.0E-03	A1146785.1	EST_HUMAN	cy84608.x1 NCL_CGAP_CL11 Homo sapiens cDNA clone IMAGE:1672503 3' similar to TR:Q82384 Q82384
852	13622	26282	8.91	1.0E-03	D87675.1	NT	ZINC FINGER PROTEIN.
1144	13899	26590	2.9	1.0E-03	4503872	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
1215	13965	26632	7.65	1.0E-03	8923270	NT	Homo sapiens glutamate decarboxylase 1 (brain, 87kD) (GAD1), transcript variant GAD67, mRNA
1215	13965	26633	7.65	1.0E-03	8923270	NT	Homo sapiens hypothetical protein FLJ20291 (FLJ20291), mRNA
1322	14071	26744	1.5	1.0E-03	AB046783.1	NT	Homo sapiens hypothetical protein FLJ20291 (FLJ20291), mRNA
1324	14073	26748	0.99	1.0E-03	AF167708.1	NT	Homo sapiens mRNA for KIAA1563 protein, partial cds
2337	15081	27798	1.33	1.0E-03	AF231981.1	NT	Homo sapiens cytosine-rich repeat-containing protein S62 precursor, mRNA, complete cds
							Homo sapiens long chain polyunsaturated fatty acid elongation enzyme (HELO1) mRNA, complete cds

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2466	15184	27924	1.7	1.0E-03	AF550066.1	NT	Homo sapiens MHC class 1 region
2511	15228		0.96	1.0E-03	AL137200.1	NT	Novel human gene mapping to chromosome 1
2825	14022	26689	1.47	1.0E-03	BE287369.1	EST_HUMAN	601177686F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3532965 5'
2825	14022	26690	1.47	1.0E-03	BE287369.1	EST_HUMAN	601177686F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3532965 5'
2834	15700	28349	7.48	1.0E-03	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
3210	15973		1.27	1.0E-03	AF231981.1	NT	Homo sapiens long chain polyunsaturated fatty acid elongation enzyme (HELO1) mRNA, complete cds
4395	17132	29763	2.6	1.0E-03	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
5479	18278	31173	2.38	1.0E-03	U78509.1	NT	Homo sapiens glucocorticoid receptor (GRL) gene, intron D, exon 5, and intron E
5479	18278	31174	2.38	1.0E-03	U78509.1	NT	Homo sapiens glucocorticoid receptor (GRL) gene, intron D, exon 5, and intron E
5678	18472	31388	0.96	1.0E-03	AF227138.1	NT	Homo sapiens candidate taste receptor 1ZR14 gene, complete cds
5825	18614	31546	10.32	1.0E-03	455792	NT	Homo sapiens neurofibromin 1 (neurofibromatosis, von Recklinghausen disease, Watson disease) (NF1) mRNA
6104	18882	31850	1.4	1.0E-03	7662241	NT	Homo sapiens KIAA0672 gene product (KIAA0672), mRNA
6894	19611	32650	2.01	1.0E-03	11431590	NT	Homo sapiens protein kinase C, beta 1 (PRKCB1), mRNA
7150	19637	32907	3.49	1.0E-03	D42072.1	NT	Human mRNA for NF1 N-isoform-exon11, complete cds
8159	20862	33984	2.54	1.0E-03	AB037832.1	NT	Homo sapiens mRNA for KIAA1411 protein, partial cds
8441	21133	34269	1.2	1.0E-03	Y10183.1	NT	H. sapiens mRNA for MEMO protein
8547	21239	34382	1.38	1.0E-03	AF182032.1	NT	Homo sapiens protein kinase inhibitor gamma (PKIG) mRNA, complete cds
8352	20423	33542	1.79	1.0E-03	AB040918.1	NT	Homo sapiens mRNA for KIAA1485 protein, partial cds
9356	20427	33546	1.28	1.0E-03	AF091395.1	NT	Homo sapiens Tric leoforn mRNA, complete cds
9488	22141	35319	8.29	1.0E-03	X13474.1	NT	Human PrA4 gene for Alzheimer's disease A4 amyloid protein precursor (exon 9)
9488	22141	35320	8.29	1.0E-03	X13474.1	NT	Human PrA4 gene for Alzheimer's disease A4 amyloid protein precursor (exon 9)
9625	22278	35467	0.79	1.0E-03	AL049801.1	NT	Novel human gene mapping to chromosome 13, similar to rat RhoGAP
10045	22693	35910	0.62	1.0E-03	11433846	NT	Homo sapiens ryanodine receptor 3 (RYR3), mRNA
12487	24846		1.84	1.0E-03	AJ230125.1	NT	Homo sapiens GGT1 gene, exon 1
12566	24896		2.84	1.0E-03	11417858	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2), mRNA
12739	25391		1.48	1.0E-03	AF240786.1	NT	Homo sapiens glutathione S-transferase theta 1 (GSTT1) genes, complete cds
10492	23138		1.03	8.0E-04	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
3944	16994	29333	1.63	8.0E-04	AF142482.1	NT	Homo sapiens transcription enhancer factor-3 mRNA, complete cds
6283	18088	30747	4.23	5.0E-04	AB014512.1	NT	Homo sapiens mRNA for KIAA0612 protein, partial cds
5283	18088	30748	4.23	5.0E-04	AB014512.1	NT	Homo sapiens mRNA for KIAA0612 protein, partial cds
5957	18739	31698	4.22	5.0E-04	AA722434.1	EST_HUMAN	zg87g06.s1 Soares_fetal_NBHH19W Homo sapiens cDNA clone IMAGE:406594 3'

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Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6810	18648	32693	1.29	5.0E-04	AJ015900.1	EST_HUMAN	cd33d05.s1 Soares_total_fetus_Nb2Hf8_9w Homo sapiens cDNA clone IMAGE:1623368 3'
8537	21229	34371	1.11	5.0E-04	BF529115.1	EST_HUMAN	802042163F1 NCI_CGAP_Brm67 Homo sapiens cDNA clone IMAGE:4180023 5'
12206	25394	30619	9.99	5.0E-04	T89398.1	EST_HUMAN	y89b04.s1 Soares_fetal_liver_spleen_1NfLS Homo sapiens cDNA clone IMAGE:116239 3'
12758	25017		1.5	5.0E-04	D25217.2	NT	Homo sapiens mRNA for KIAA0027 protein, partial cds
12761	25021		1.86	5.0E-04	8558724	NT	Homo sapiens cleavage and polyadenylation specific factor 1, 160kD subunit (CPSF1), mRNA
1834	14573		2.64	4.0E-04	L05094.1	NT	Homo sapiens ribosomal protein L27 mRNA, complete cds
2662	16372	28111	0.92	4.0E-04	4506008	NT	Homo sapiens protein phosphatase 1, regulatory subunit 10 (PPP1R10) mRNA
3661	18414	29053	1.38	4.0E-04	AW197851.1	EST_HUMAN	xn89f12.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2701679 3'
3661	18414	29054	1.38	4.0E-04	AW197851.1	EST_HUMAN	xn89f12.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2701679 3'
4069	17403	30038	2.87	4.0E-04	AI561312.1	EST_HUMAN	hw11f10.x1 NCI_CGAP_Brm52 Homo sapiens cDNA clone IMAGE:2259403 3' similar to TR:Q16285 Q16285 PROTEIN TYROSINE PHOSPHATASE :
6376	19145	32143	1.82	4.0E-04	11440670	NT	Homo sapiens solute carrier family 22 (organic cation transporter), member 1-like (SLC22A1L), mRNA
6378	19145	32144	1.82	4.0E-04	11440670	NT	Homo sapiens solute carrier family 22 (organic cation transporter), member 1-like (SLC22A1L), mRNA
6812	19473		1.18	4.0E-04	L27386.1	NT	Homo sapiens huntingtin (HD) gene, exon 37
11431	23198	36429	1.5	4.0E-04	11545792	NT	Homo sapiens hypothetical protein FLJ12458 (FLJ12458), mRNA
597	13375	26005	1.44	3.0E-04	AB022785.1	NT	Homo sapiens ASH2L gene, complete cds, similar to Drosophila ash2 gene
704	13479	26127	0.88	3.0E-04	4502808	NT	Homo sapiens complement component 5 (C5) mRNA
1733	14475	27173	1.19	3.0E-04	AF167706.1	NT	Homo sapiens cysteine-rich repeat-containing protein S52 precursor, mRNA, complete cds
1733	14475	27174	1.19	3.0E-04	AF167706.1	NT	Homo sapiens cysteine-rich repeat-containing protein S52 precursor, mRNA, complete cds
1765	14507	27208	2.61	3.0E-04	4557656	NT	Homo sapiens E1A binding protein p300 (EP300) mRNA
2073	14805	27534	1.27	3.0E-04	11427778	NT	Homo sapiens hepatic leukemia factor (HLF), mRNA
2073	14805	27536	1.27	3.0E-04	11427778	NT	Homo sapiens hepatic leukemia factor (HLF), mRNA
4166	16906	28934	0.83	3.0E-04	AA464805.1	EST_HUMAN	zw63g08.l1 Soares_total_fetus_Nb2Hf8_9w Homo sapiens cDNA clone IMAGE:774782 5'
5695	18390	31301	3.41	3.0E-04	AB011536.1	NT	Homo sapiens zinc finger protein 277 (ZNF277), mRNA
6059	18839	31800	1.33	3.0E-04	AB011536.1	NT	Homo sapiens mRNA for MEGF2, partial cds
6360	19130	32125	4	3.0E-04	11526228	NT	Homo sapiens chromosome 21 open reading frame 18 (C21ORF18), mRNA
7696	20359	33473	1.7	3.0E-04	4828963	NT	Homo sapiens neuronal cell adhesion molecule (NRCAM) mRNA
8098	20792	33923	1.18	3.0E-04	AF152309.1	NT	Homo sapiens protocadherin alpha 13 (PCDH-alpha13) mRNA, complete cds
8486	21176	34322	4.35	3.0E-04	AB014579.1	NT	Homo sapiens mRNA for KIAA0679 protein, partial cds
9492	22145	36326	5.23	3.0E-04	AF087942.1	NT	Homo sapiens glycogenin-1L mRNA, complete cds
11043	23713	36993	3.26	3.0E-04	4757821	NT	Homo sapiens axonal transport of synaptic vesicles (ATSV) mRNA
11679	24274	37596	1.94	3.0E-04	U26711.1	NT	Human cbl-b truncated form 1 lacking leucine zipper mRNA, complete cds

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9853	22305	35501	0.7	2.0E-04	AI910393.1	EST_HUMAN	w30h11.x1 NCI_CGAP_Co18 Homo sapiens cDNA clone IMAGE:2391813 3'
9853	22305	35502	0.7	2.0E-04	AI910393.1	EST_HUMAN	w30h11.x1 NCI_CGAP_Co18 Homo sapiens cDNA clone IMAGE:2391813 3'
144	12859	25601	1.94	1.0E-04	BE295714.1	EST_HUMAN	601175762F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3531038 5'
3088	15851	28492	2.07	1.0E-04	BE253433.1	EST_HUMAN	601111896F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3352559 5'
3088	15851	28493	2.07	1.0E-04	BE253433.1	EST_HUMAN	601111896F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3352559 5'
4328	17065	29894	1.7	1.0E-04	9506692	NT	Homo sapiens hypothetical protein (FLJ20746), mRNA
5982	18763	31727	0.94	1.0E-04	AE000289.1	NT	Escherichia coli K-12 MG1655 section 150 of 400 of the complete genome
6173	18850	31922	0.73	1.0E-04	AL040518.1	EST_HUMAN	DKFZp434G0314.1 434 (synonym: htss3) Homo sapiens cDNA clone DKFZp434G0314 5'
6182	18859	31933	0.72	1.0E-04	H08270.1	EST_HUMAN	y87f02.1 Sources Infant brain INIB Homo sapiens cDNA clone IMAGE:45053 5'
6428	19104	32190	0.58	1.0E-04	AV725992.1	EST_HUMAN	AV725992 HTC Homo sapiens cDNA clone HT08EF05 5'
8012	20707	33836	0.83	1.0E-04	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
8012	20707	33837	0.83	1.0E-04	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
9155	21888	35054	2.76	1.0E-04	11428710	NT	Homo sapiens paired box gene 5 (B-cell lineage specific activator protein) (PAX5), mRNA
9887	22339	35533	2.04	1.0E-04	BE780478.1	EST_HUMAN	601468748F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:3872089 5'
11000	23873	38829	3.08	1.0E-04	U66560.1	NT	Homo sapiens IL-1 receptor antagonist IL-1Ra (IL-1RN) gene, alternatively spliced forms, complete cds
11288	23949	37245	2.82	1.0E-04	AI272244.1	EST_HUMAN	ap22a02.x1 Schiller oligodendrogloma Homo sapiens cDNA clone IMAGE:1950122 3' similar to TR:Q62846
11754	24345	37675	1.72	1.0E-04	11418871	NT	Q62845 NEURAL CELL ADHESION PROTEIN BIG-2 PRECURSOR. ;
12330	12859	25601	1.45	1.0E-04	BE295714.1	EST_HUMAN	Homo sapiens KIAA0164 gene product (KIAA0164), mRNA
12608	12859	25601	1.51	1.0E-04	BE295714.1	EST_HUMAN	601175762F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3531038 5'
1459	14206	28892	1.83	9.0E-05	AF027302.1	NT	601175762F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3531038 5'
3153	15916	28561	1.45	9.0E-05	7682027	NT	Homo sapiens TNF-alpha stimulated ABC protein (ABC50) mRNA, complete cds
3153	15916	28562	1.45	9.0E-05	7682027	NT	Homo sapiens KIAA0255 gene product (KIAA0255), mRNA
5320	18123	30781	1.33	9.0E-05	X82569.1	NT	Homo sapiens KIAA0255 gene product (KIAA0255), mRNA
5320	18123	30782	1.33	9.0E-05	X82569.1	NT	Homo sapiens KIAA0255 gene product (KIAA0255), mRNA
8150	20844	33974	1.77	9.0E-05	AF274753.1	NT	M.musculus glyT1 gene (exons 1c and 2)
4499	17235	28866	3.18	8.0E-05	AI700698.1	EST_HUMAN	M.musculus glyT1 gene (exons 1c and 2)
4499	17235	28867	3.18	8.0E-05	AI700698.1	EST_HUMAN	M.musculus glyT1 gene (exons 1c and 2)
6849	19549	32578	0.76	8.0E-05	11419376	NT	Homo sapiens progressive ankylosis-like protein (ANK) mRNA, complete cds
7141	19828	32897	1.76	8.0E-05	11428529	NT	Homo sapiens tubulin alpha-1 chain (HUMAN);
7141	19828	32898	1.76	8.0E-05	11428529	NT	we09e04.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:2340808 3' similar to gb:K00558
							TUBULIN ALPHA-1 CHAIN (HUMAN);
							we09e04.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:2340808 3' similar to gb:K00558
							TUBULIN ALPHA-1 CHAIN (HUMAN);
							we09e04.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:2340808 3' similar to gb:K00558
							TUBULIN ALPHA-1 CHAIN (HUMAN);
							Homo sapiens KIAA0193 gene product (KIAA0193), mRNA
							Homo sapiens proteasome (prosome, macropain) 26S subunit, non-ATPase, 11 (PSMD11), mRNA
							Homo sapiens proteasome (prosome, macropain) 26S subunit, non-ATPase, 11 (PSMD11), mRNA

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8097	20701	33022	1.97	8.0E-05	AF032897.1	NT	Homo sapiens potassium channel subunit (HERG-3) mRNA, complete cds
9265	22019	35187	2	8.0E-05	11420944	NT	Homo sapiens KIAA0255 gene product (KIAA0255), mRNA
9265	22019	35188	2	8.0E-05	11420944	NT	Homo sapiens KIAA0255 gene product (KIAA0255), mRNA
9748	22309	35604	3.1	8.0E-05	5174844	NT	Homo sapiens prolidase (proline catabolase) (PRODH) mRNA
9779	22430		2.94	8.0E-05	AB037816.1	NT	Homo sapiens KIAA1395 protein, partial cds
10135	22783	35994	0.8	8.0E-05	9845523	NT	Homo sapiens early growth response 2 (Krox-20 (Drosophila) homolog) (EGR2), mRNA
10813	23307	36546	1.3	8.0E-05	AF112152.1	NT	Homo sapiens developmental arrest and neural crest EGF-like protein mRNA, complete cds
11468	24089	37377	1.86	8.0E-05	10804024	NT	Homo sapiens HCF-binding transcription factor Zhangfai (ZF), mRNA
12535	24879		12.4	8.0E-05	AA620056.1	EST_HUMAN	zr4b01.a1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:744649 3' similar to contains L1.L1 L1 repetitive element
269	13077	26718	32.81	7.0E-05	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
269	13077	26719	32.81	7.0E-05	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
4333	17072	28701	5.18	7.0E-05	M95708.1	NT	Homo sapiens Ly-6-like protein (CD59) mRNA, complete cds
4380	17117		1.3	7.0E-05	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
9117	21805	34971	1.31	4.0E-05	BE439025.1	EST_HUMAN	HTM1-288F HTM1 Homo sapiens cDNA
5356	18159	30842	1.58	3.0E-05	BF528041.1	EST_HUMAN	602071146F1 NCL_OGAP_Bm64 Homo sapiens cDNA clone IMAGE:4214147 5'
5588	25071	31204	0.83	3.0E-05	4603364	NT	Homo sapiens dedicator of cyto-kinesis 1 (DOCK1) mRNA
7268	19952	33027	1.51	3.0E-05	AW958121.1	EST_HUMAN	EST370191 IMAGE resequences, MAGE Homo sapiens cDNA
7268	19952	33028	1.51	3.0E-05	AW958121.1	EST_HUMAN	EST370191 IMAGE resequences, MAGE Homo sapiens cDNA
8278	20972	34113	0.55	3.0E-05	AW157233.1	EST_HUMAN	au83b08.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2783799 3' similar to TR:O60463 O60463 TYPE-2 PHOSPHATIDIC ACID PHOSPHOHYDROLASE. [1]:
8278	20972	34114	0.55	3.0E-05	AW157233.1	EST_HUMAN	au83b08.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2783799 3' similar to TR:O60463 O60463 TYPE-2 PHOSPHATIDIC ACID PHOSPHOHYDROLASE. [1]:
9255	21934	35107	1.89	3.0E-05	7862289	NT	Homo sapiens KIAA0763 gene product (KIAA0763), mRNA
9255	21934	35108	1.89	3.0E-05	7862289	NT	Homo sapiens KIAA0763 gene product (KIAA0763), mRNA
9847	22200	35495	0.73	3.0E-05	BF213448.1	EST_HUMAN	601845212F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:4070451 5'
10792	23475	36716	1.49	3.0E-05	R83190.1	EST_HUMAN	yp87g11.1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:184488 5'
1639	14385	27072	2.31	2.0E-05	7862027	NT	Homo sapiens KIAA0255 gene product (KIAA0255), mRNA
1639	14385	27073	2.31	2.0E-05	7862027	NT	Homo sapiens KIAA0255 gene product (KIAA0255), mRNA
1934	14669	27384	2.51	2.0E-05	4807512	NT	Homo sapiens tissue inhibitor of metalloproteinase 3 (Sorsby fundus dystrophy, pseudoinflammatory) (TIMP3), mRNA
1937	14672	27388	1.92	2.0E-05	BE383873.1	EST_HUMAN	601312161F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3658962 5'
2428	15147	27880	2.22	2.0E-05	5453965	NT	Homo sapiens G protein-coupled receptor 19 (GPR19) mRNA
2428	15147	27881	2.22	2.0E-05	5453965	NT	Homo sapiens G protein-coupled receptor 19 (GPR19) mRNA

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2468	15186	27925	3.28	2.0E-05	AF240786.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
2517	15233	27973	1.85	2.0E-05	4768423	NT	Homo sapiens glycine cleavage system protein H (aminomethyl carrier) (GCSH) mRNA
3155	15916	28564	1.98	2.0E-05	AF015452.1	NT	Homo sapiens Usurpin-gamma mRNA, complete cds
3552	16307	28958	3.07	2.0E-05	7705900	NT	Homo sapiens unconventional myosin-15 (LOC51168), mRNA
3552	16307	28957	3.07	2.0E-05	7705900	NT	Homo sapiens unconventional myosin-15 (LOC51168), mRNA
3605	15358	28998	1.29	2.0E-05	AB037807.1	NT	Homo sapiens mRNA for KIAA1395 protein, partial cds
3752	19485	29122	0.88	2.0E-05	AI290284.1	EST_HUMAN	gm01602.x1 Soares_Nih-MP_u_S1 Homo sapiens cDNA clone IMAGE:1880648 3' similar to WP:12317.4
4328	17067	29895	1.32	2.0E-05	7657185	NT	CE03705 ; Homo sapiens hypofibrin protein (HS322B1A), mRNA
4978	17701	30308	2.72	2.0E-05	7681979	NT	Homo sapiens KIAA0187 gene product (KIAA0187), mRNA
5392	18192	30884	4.21	2.0E-05	7705764	NT	Homo sapiens CGI-48 protein (LOC51098), mRNA
5392	18192	30885	4.21	2.0E-05	7705764	NT	Homo sapiens CGI-48 protein (LOC51098), mRNA
5611	18407	31319	1.27	2.0E-05	11225608	NT	Homo sapiens angiotensin I converting enzyme (peptidyl-dipeptidase A) 2 (ACE2), mRNA
5611	18407	31320	1.27	2.0E-05	11225608	NT	Homo sapiens angiotensin I converting enzyme (peptidyl-dipeptidase A) 2 (ACE2), mRNA
5651	18446	31380	0.7	2.0E-05	11525883	NT	Homo sapiens membrane protein, palmitoylated 3 (MAGUK p55 subfamily member 3) (MPP3), mRNA
6051	18831	31784	5.04	2.0E-05	M59724.1	NT	Human muscle-type phosphotransferase (PFK-M) gene, exon 7
6358	19128	32122	1.16	2.0E-05	11427182	NT	Homo sapiens transcription factor 2, hepatic; LF-B3; variant hepatic nuclear factor (TCF2), mRNA
6358	19128	32123	1.16	2.0E-05	11427182	NT	Homo sapiens transcription factor 2, hepatic; LF-B3; variant hepatic nuclear factor (TCF2), mRNA
6476	19243	32243	2.45	2.0E-05	AF257737.1	NT	Homo sapiens ciliary dynein heavy chain 9 (DNAH9) mRNA, complete cds
6666	19563	32617	1.82	2.0E-05	11435773	NT	Homo sapiens huntingtin (Huntington disease) (HD), mRNA
9041	21731	34886	1.06	2.0E-05	11421786	NT	Homo sapiens ribophorin II (RPN2), mRNA
10280	22928	36142	0.84	2.0E-05	11434330	NT	Homo sapiens KIAA1065 protein (KIAA1065), mRNA
10624	23317	36557	2.46	2.0E-05	4757853	NT	Homo sapiens bone morphogenetic protein receptor, type IA (BMPRI1A) mRNA
11700	24296	37620	3.02	2.0E-05	7662289	NT	Homo sapiens KIAA0763 gene product (KIAA0763), mRNA
11700	24296	37621	3.02	2.0E-05	7662289	NT	Homo sapiens KIAA0763 gene product (KIAA0763), mRNA
12289	24724	31065	2.3	2.0E-05	AF240786.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
12698	24980	30894	4.68	2.0E-05	11418164	NT	Homo sapiens adenylosuccinate lyase (ADSL), mRNA
5527	18325	31226	8.41	1.0E-05	AA284851.1	EST_HUMAN	z23h04.1 Scores every tumor NihHOT Homo sapiens cDNA clone IMAGE:714007 5' similar to TR:G1067084 G1067084 F5542.8 ;
5527	18325	31227	8.41	1.0E-05	AA284851.1	EST_HUMAN	z23h04.1 Scores every tumor NihHOT Homo sapiens cDNA clone IMAGE:714007 5' similar to TR:G1067084 G1067084 F5542.8 ;

Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7414	20091	33175	4.3	1.0E-06	BF370000.1	EST_HUMAN	RC8-FN0019-290800-011-G11 FN0019 Homo sapiens cDNA
7414	20091	33176	4.3	1.0E-06	BF370000.1	EST_HUMAN	RC8-FN0019-290800-011-G11 FN0019 Homo sapiens cDNA
8094	20788	33920	1.49	9.0E-06	BE897259.1	EST_HUMAN	601437232F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3922423 5'
5424	18223		2.77	8.0E-06	AW836047.1	EST_HUMAN	PMO-LT0019-090300-002-409 LT0019 Homo sapiens cDNA
3989	16639	29278	0.74	7.0E-06	AF231920.1	NT	Homo sapiens chromosome 21 unknown mRNA
3478	16232	28888	20.13	6.0E-06	M26873.1	NT	Human glyceraldehyde-3-phosphate dehydrogenase pseudogene 3'end
5552	18349	31258	0.74	6.0E-06	11422642	NT	Homo sapiens sialyltransferase 6 (N-acetylglucosaminide alpha 2,3-sialyltransferase) (SIA16), mRNA
11534	24134	37439	3.36	6.0E-06	7662289	NT	Homo sapiens KIAA0763 gene product (KIAA0763), mRNA
11534	24134	37440	3.36	6.0E-06	7662289	NT	Homo sapiens KIAA0763 gene product (KIAA0763), mRNA
11584	24183	37498	2.05	6.0E-06	8923939	NT	Homo sapiens myosin, heavy polypeptide 2, skeletal muscle, adult (MYH2), mRNA
11768	24360	37692	1.83	6.0E-06	7662289	NT	Homo sapiens KIAA0763 gene product (KIAA0763), mRNA
11768	24360	37693	1.83	6.0E-06	7662289	NT	Homo sapiens KIAA0763 gene product (KIAA0763), mRNA
312	13116	25754	2.74	5.0E-06	AB032968.1	NT	Homo sapiens mRNA for KIAA1172 protein, partial cds
822	13592	26280	4.08	5.0E-06	AB032968.1	NT	Homo sapiens mRNA for KIAA1172 protein, partial cds
822	13592	26261	4.08	5.0E-06	AB032968.1	NT	Homo sapiens phosphodiesterase 6A, cGMP-specific, rod, alpha (PDE6A), mRNA
2624	15336		1.43	5.0E-06	11416767	NT	H. sapiens DNA for monomelic oxidase type A (7) (partial)
4846	17576		1.39	5.0E-06	X00812.1	NT	Homo sapiens NOD1 protein (NOD1) gene, exons 1, 2, and 3
6553	19318	32324	1.15	5.0E-06	AF149773.1	NT	Homo sapiens A kinase (PRKA) anchor protein 1 (AKAP1), mRNA
6684	19901	32639	5.18	5.0E-06	11424399	NT	Homo sapiens A kinase (PRKA) anchor protein 1 (AKAP1), mRNA
6684	19901	32640	5.18	5.0E-06	11424399	NT	Homo sapiens A kinase (PRKA) anchor protein 1 (AKAP1), mRNA
6923	19659	32709	0.71	5.0E-06	AB023177.1	NT	Homo sapiens mRNA for KIAA0600 protein, partial cds
7415	20082	33177	1.96	5.0E-06	AB024334.1	NT	Homo sapiens mRNA for 14-3-3gamma, complete cds
8005	20700	33828	1.35	5.0E-06	AB024334.1	NT	Human type IV collagenase (CLG4B) gene, exon 5
8005	20700	33829	1.35	5.0E-06	M68347.1	NT	Human type IV collagenase (CLG4B) gene, exon 5
11793	24383	37715	1.4	5.0E-06	7661973	NT	Homo sapiens KIAA0175 gene product (KIAA0175), mRNA
4168	16608		12.32	3.0E-06	H68656.1	EST_HUMAN	y87h12r1 Soares fetal liver spleen 1NFSL Homo sapiens cDNA clone IMAGE:212327 5'
406	13181		4.24	2.0E-06	4503098	NT	Homo sapiens chondroitin sulfate proteoglycan 4 (melanoma-associated) (CSPG4), mRNA
730	13504	26159	0.91	2.0E-06	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C048
4708	17440	30072	1.89	2.0E-06	BE149074.1	EST_HUMAN	RC3-HT0230-040500-110-g02 HT0230 Homo sapiens cDNA
7361	20042	33120	0.62	2.0E-06	BF369731.1	EST_HUMAN	QV4-GN0120-260900-427-b12 GN0120 Homo sapiens cDNA
7361	20042	33121	0.62	2.0E-06	BF369731.1	EST_HUMAN	QV4-GN0120-260900-427-b12 GN0120 Homo sapiens cDNA
8879	21570		5.63	2.0E-06	AV688481.1	EST_HUMAN	AV688481 GK6 Homo sapiens cDNA clone GKCFMD07 5'
12009	24543		2.81	2.0E-06	AW249440.1	EST_HUMAN	2819351.Sprtime NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2819351 5'

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
608	13386	26016	2.6	1.0E-06	4828863	NT	Homo sapiens neuronal cell adhesion molecule (NRCAM) mRNA
608	13386	26017	2.6	1.0E-06	4828863	NT	Homo sapiens neuronal cell adhesion molecule (NRCAM) mRNA
656	13433	26074	3.38	1.0E-06	Y18900.1	NT	Human endogenous retrovirus type K (HERV-K), gag, pol and env genes
1774	14516	27216	2.56	1.0E-06	AW65054.1	EST_HUMAN	EST367124 MAGE resequences, MAGE Homo sapiens cDNA
1774	14516	27217	2.56	1.0E-06	AW65054.1	EST_HUMAN	EST367124 MAGE resequences, MAGE Homo sapiens cDNA
2262	15527	27729	1.06	1.0E-06	U51472.2	NT	Felis catus superfast myosin heavy chain (skMyHC) mRNA, complete cds
6869	17946	30541	1.3	1.0E-06	6912735	NT	Homo sapiens transient receptor potential channel 5 (TRPC5), mRNA
6849	19431	32447	0.67	1.0E-06	6912455	NT	Homo sapiens guanine nucleotide exchange factor for Rap1 (KIAA0277), mRNA
8111	20805	33938	1.24	1.0E-06	7661803	NT	Homo sapiens HSPC144 protein (HSPC144), mRNA
8111	20805	33939	1.24	1.0E-06	7661803	NT	Homo sapiens HSPC144 protein (HSPC144), mRNA
8616	21308	34430	20.66	1.0E-06	11419429	NT	Homo sapiens similar to ectonucleotide pyrophosphatase/phosphodiesterase 3 (H. sapiens) (LOC83214), mRNA
8749	21441	34588	2.09	1.0E-06	AF274893.1	NT	Homo sapiens secretory pathway component Sec31B-1 mRNA, alternatively spliced, complete cds
10059	22707	35924	1.24	1.0E-06	AB033116.1	NT	Homo sapiens mRNA for KIAA1290 protein, partial cds
10059	22707	35925	1.24	1.0E-06	AB033116.1	NT	Homo sapiens mRNA for KIAA1290 protein, partial cds
11999	13386	26016	1.97	1.0E-06	4828863	NT	Homo sapiens neuronal cell adhesion molecule (NRCAM) mRNA
11999	13386	26017	1.97	1.0E-06	4828863	NT	Homo sapiens neuronal cell adhesion molecule (NRCAM) mRNA
7457	20131		2.6	6.0E-07	BE141849.1	EST_HUMAN	IL5-HT0117-011099-004-D07 HT0117 Homo sapiens cDNA
8832	21524	34670	0.69	6.0E-07	BE868012.1	EST_HUMAN	801440317F1 NIH_MGC 72 Homo sapiens cDNA clone IMAGE:3925133 5'
8832	21524	34671	0.69	6.0E-07	BE868012.1	EST_HUMAN	801440317F1 NIH_MGC 72 Homo sapiens cDNA clone IMAGE:3925133 5'
10497	23143	36369	0.57	6.0E-07	AA320332.1	EST_HUMAN	EST22672 Adipose tissue, white II Homo sapiens cDNA 5' end
10497	23143	36370	0.57	6.0E-07	AA320332.1	EST_HUMAN	EST22672 Adipose tissue, white II Homo sapiens cDNA 5' end
11382	23969	37290	1.46	6.0E-07	X15904.1	NT	Human mRNA for alpha-actinin
7913	20608	33739	1.91	5.0E-07	AL043314.2	EST_HUMAN	DKFZp434N0323_r1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434N0323 5'
8042	20736	33869					z07612.s1 Soares NIH-MP_u_S1 Homo sapiens cDNA clone IMAGE:767758 3' similar to TR:G1304125
9574	22227	35412	11.73	5.0E-07	AA418026.1	EST_HUMAN	G1304125 PM94 MRNA :
11535	24135	37441	2.68	5.0E-07	BF154912.1	EST_HUMAN	RCO-BT0812-250500-032-a09 BT0812 Homo sapiens cDNA
11535	24135	37441	1.98	5.0E-07	BE148597.1	EST_HUMAN	MRO-HT0241-150500-010-502 HT0241 Homo sapiens cDNA
11535	24135	37442	1.98	5.0E-07	BE148597.1	EST_HUMAN	MRO-HT0241-150500-010-502 HT0241 Homo sapiens cDNA
918	13985	26349	1.59	4.0E-07	BE004436.1	EST_HUMAN	GMO-BN0106-170300-293-a06 BN0106 Homo sapiens cDNA
928	13985	26350	1.04	4.0E-07	AB030176.1	NT	Homo sapiens PAD-H19 mRNA for peptidylarginine deiminase type II, complete cds
928	13985	26360	1.04	4.0E-07	AB030176.1	NT	Homo sapiens PAD-H19 mRNA for peptidylarginine deiminase type II, complete cds
1903	14640	27349	1.07	4.0E-07	5453572	NT	Homo sapiens brefeldin A-inhibited guanine nucleotide-exchange protein 2 (BIG2), mRNA



Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5478	18277	31172	0.61	4.0E-07	4557328	NT	Homo sapiens apolipoprotein H (beta-2-glycoprotein I) (APOH) mRNA
5765	18556	31482	0.95	4.0E-07	U00002.1	NT	Human N-methyl-D-aspartate receptor modulatory subunit 2A (NMR2A) mRNA; complete cds
5765	18566	31483	0.95	4.0E-07	U00002.1	NT	Human N-methyl-D-aspartate receptor modulatory subunit 2A (NMR2A) mRNA; complete cds
6725	19559	32590	6.47	4.0E-07	Y11339.2	NT	Homo sapiens mRNA for GalNAc alpha-2, G-sialyltransferase I, long form
6725	19559	32591	6.47	4.0E-07	Y11339.2	NT	Homo sapiens mRNA for GalNAc alpha-2, G-sialyltransferase I, long form
6921	19657	32703	1	4.0E-07	7710126	NT	Homo sapiens ligase III, DNA, ATP-dependent (LIG3), transcript variant alpha, mRNA
6908	19450	32408	1.05	4.0E-07	11422155	NT	Homo sapiens cystic fibrosis transmembrane conductance regulator, ATP-binding cassette (sub-family C, member 7) (CFTR), mRNA
8038	20731	33983	0.57	4.0E-07	4557708	NT	Homo sapiens laminin, alpha 2 (merotin, congenital muscular dystrophy) (LAMA2) mRNA
8256	20950	34087	2.83	4.0E-07	11421793	NT	Homo sapiens v-src avian sarcoma (Schmidt-Ruppin A-2) viral oncogene homolog (SRC), mRNA
8518	21210	34353	0.76	4.0E-07	11423233	NT	Homo sapiens cytochrome P450, subfamily IVB, polypeptide 1 (CYP4B1), mRNA
9147	21878	35043	1.23	4.0E-07	AB011168.1	NT	Homo sapiens mRNA for KIAA0594 protein, partial cds
9147	21878	35044	1.23	4.0E-07	AB011168.1	NT	Homo sapiens mRNA for KIAA0594 protein, partial cds
11116	23780	37002	1.88	4.0E-07	11803122	NT	Homo sapiens AXL receptor tyrosine kinase (AXL), transcript variant 1, mRNA
11116	23788	37063	1.88	4.0E-07	11803122	NT	Homo sapiens AXL receptor tyrosine kinase (AXL), transcript variant 1, mRNA
11412	23170	36407	3.61	4.0E-07	AB042557.1	NT	Homo sapiens mRNA, similar to rat myomeslin, complete cds
11415	23182	36411	1.82	4.0E-07	AB033116.1	NT	Homo sapiens mRNA for KIAA1200 protein, partial cds
11415	23182	36412	1.82	4.0E-07	AB033116.1	NT	Homo sapiens mRNA for KIAA1200 protein, partial cds
12180	24852		7.76	4.0E-07	11418318	NT	Homo sapiens G-2 and S-phase expressed 1 (GTSE1), mRNA
236	13040	25685	1.14	3.0E-07	AB032998.1	NT	Homo sapiens mRNA for KIAA1172 protein, partial cds
854	13624	26294	29.53	3.0E-07	4502166	NT	Homo sapiens amyloid beta (A4) precursor protein (protease resistant, Alzheimer disease) (APP), mRNA
854	13624	26295	29.53	3.0E-07	4502166	NT	Homo sapiens amyloid beta (A4) precursor protein (protease resistant, Alzheimer disease) (APP), mRNA
1422	15569	26855	1.29	3.0E-07	4768813	NT	Homo sapiens N-myc (and STAT) interactor (NMI), mRNA
2440	15529	27895	1.68	3.0E-07	U03255.1	NT	Human beta-prime-adaptin (BAM22) gene, exon 7
3264	16010	28987	1.3	3.0E-07	5174478	NT	Homo sapiens pericentriolar (PCNT) mRNA
4729	17491	30098	12.88	1.0E-07	4503470	NT	Homo sapiens eukaryotic translation elongation factor 1 alpha 1 (EEF1A1) mRNA
6933	19103	32091	2.48	1.0E-07	BE569486.1	EST_HUMAN	601336520F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3681821 5'
9344	20416	33534	1.16	1.0E-07	AW379978.1	EST_HUMAN	RCO-HT0258-211199-011-g05 HT0258 Homo sapiens cDNA
9344	20415	33535	1.16	1.0E-07	AW379978.1	EST_HUMAN	RCO-HT0258-211199-011-g05 HT0258 Homo sapiens cDNA
9864	22316	36513	1.8	1.0E-07	R10887.1	EST_HUMAN	y38c08.s1 Source fetal liver spleen INFLS Homo sapiens cDNA clone IMAGE:129194 3'
10004	23298	36538	3.44	1.0E-07	11427757	NT	Homo sapiens KIAA0649 gene product (KIAA0649), mRNA
10804	23298	36539	3.44	1.0E-07	11427757	NT	Homo sapiens KIAA0649 gene product (KIAA0649), mRNA

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11260	23041	37235	2.03	1.0E-07	AA553761.1	EST_HUMAN	nc28g02.41 NCI_CGAP_Cot11 Homo sapiens cDNA clone IMAGE:1014982 3'
11443	23212	36443	14.01	1.0E-07	11426272	NT	Homo sapiens ribosomal protein S15 (RPS15), mRNA
11445	23212	36444	14.01	1.0E-07	11426272	NT	Homo sapiens ribosomal protein S15 (RPS15), mRNA
881	13650	26319	3.52	9.0E-08	BE060973.1	EST_HUMAN	PM4-BT0724-010400-008-a12 BT0724 Homo sapiens cDNA
1253	14002	26570	1.12	9.0E-08	8363092	NT	Homo sapiens cat eye syndrome critical region gene 1 (CECR1), mRNA
6210	18985		0.71	9.0E-08	AJ250713.1	NT	Homo sapiens CLDN12 gene for claudin-12
7190	18976	32949	0.67	9.0E-08	7661871	NT	Homo sapiens leucyl-tRNA synthetase, mitochondrial (KIAA0028), mRNA
7286	18969	33046	0.6	9.0E-08	11419408	NT	Homo sapiens A kinase (PRKA) anchor protein (yolac) 9 (AKAP9), mRNA
7825	20520	33648	4.79	9.0E-08	4758119	NT	Homo sapiens death-associated protein (DAP), mRNA
7826	20520	33647	4.79	9.0E-08	4758119	NT	Homo sapiens death-associated protein (DAP), mRNA
9014	21704	34854	6.28	9.0E-08	X06989.1	NT	Human mRNA for amyloid A4(751) protein
9124	21812	34977	1.5	9.0E-08	11321580	NT	Homo sapiens mRNA for KIAA1365 protein, partial cds
9192	21862	35027	1.59	9.0E-08	AB037786.1	NT	Homo sapiens mRNA for KIAA1365 protein, partial cds
9238	21917		0.96	9.0E-08	AF057728.1	NT	Homo sapiens 17-beta-hydroxysteroid dehydrogenase IV (HSD17B4) gene, exon 8
9267	22021	35190	1.14	9.0E-08	4507070	NT	Homo sapiens SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 3 (SMARCA3) mRNA
9267	22021	35191	1.14	9.0E-08	4507070	NT	Homo sapiens SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 3 (SMARCA3) mRNA
10160	22808	36028	0.45	9.0E-08	AF141325.2	NT	Homo sapiens inositol polyphosphate 1-phosphatase (INPP1) gene, complete cds
10926	23608	36856	2.63	9.0E-08	AB023222.1	NT	Homo sapiens mRNA for KIAA1005 protein, partial cds
10926	23608	36857	2.63	9.0E-08	AB023222.1	NT	Homo sapiens mRNA for KIAA1005 protein, partial cds
11004	23676	36832	1.39	9.0E-08	11418082	NT	Homo sapiens mitogen-activated protein kinase kinase kinase 7 (MAP3K7), mRNA
11850	24434	37776	1.39	9.0E-08	AB011541.1	NT	Homo sapiens mRNA for MEGF8, partial cds
11850	24434	37777	1.39	9.0E-08	AB011541.1	NT	Homo sapiens mRNA for MEGF8, partial cds
1351	14099	26774	0.92	8.0E-08	AB033768.1	NT	Homo sapiens HPAD-colony10 mRNA for peptidylarginine deiminase type I, complete cds
1719	14462	27161	2.7	8.0E-08	AB017007.1	NT	Homo sapiens PMS2L16 mRNA, partial cds
1719	14462	27162	2.7	8.0E-08	AB017007.1	NT	Homo sapiens PMS2L16 mRNA, partial cds
3775	16527	29166	6.89	8.0E-08	J04499.1	NT	Human mitochondrial creatine kinase (CKMT) gene, complete cds
5991	18772	31735	0.99	5.0E-08	BE885873.1	EST_HUMAN	601507503F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3009097 5'
2176	14905	27638	1.14	3.0E-08	AJ403124.1	EST_HUMAN	AJ403124 3.4 (downregulated in larynx carcinoma) Homo sapiens cDNA clone 16
2613	15324	28067	0.99	3.0E-08	AB014607.1	NT	Homo sapiens mRNA for KIAA0707 protein, partial cds
2753	15458		2.9	3.0E-08	AA077406.1	EST_HUMAN	7B18H01 Chromosome 7 Fetal Brain cDNA Library/Homo sapiens cDNA clone 7B18H01
6847	19547	32576	1.9	3.0E-08	11419210	NT	Homo sapiens activator of S phase kinase (ASK), mRNA
6847	19547	32577	1.9	3.0E-08	11419210	NT	Homo sapiens activator of S phase kinase (ASK), mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8649	21341	34485	2.73	3.0E-08	H46898.1	EST_HUMAN	yo17g08.r1 Soares adult brain N2bSHB55Y Homo sapiens cDNA clone IMAGE:178240 5'
9197	21890	35030	0.48	3.0E-08	8922098	NT	Homo sapiens uncharacterized bone marrow protein BM039 (BM039), mRNA
9783	22434	35039	1.42	3.0E-08	AJ403124.1	EST_HUMAN	AJ403124 3.4 (downregulated in larynx carcinoma) Homo sapiens cDNA clone 18
9783	22434	35040	1.42	3.0E-08	AJ403124.1	EST_HUMAN	AJ403124 3.4 (downregulated in larynx carcinoma) Homo sapiens cDNA clone 18
10371	23017	36233	0.86	3.0E-08	BE900454.1	EST_HUMAN	601673086F1 NH_MGC_21 Homo sapiens cDNA clone IMAGE:3956517 5'
10872	23552	36790	4.11	3.0E-08	U59309.1	NT	Human fumatease precursor (FH) mRNA, nuclear gene encoding mitochondrial protein, complete cds
11863	24447	37788	1.56	3.0E-08	L26405.1	NT	Homo sapiens (huc) mRNA, complete cds
12688	25282		1.47	3.0E-08	BE382519.1	EST_HUMAN	601287955F1 NH_MGC_19 Homo sapiens cDNA clone IMAGE:3628213 5'
12751	25013		3.56	3.0E-08	11418177	NT	Homo sapiens Ran GTPase activating protein 1 (RANGAP1), mRNA
2071	14803	27531	2.66	2.0E-08	BE294281.1	EST_HUMAN	601172658F1 NH_MGC_17 Homo sapiens cDNA clone IMAGE:3528134 5'
2231	14859	27690	1.53	2.0E-08	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
4264	17005	29637	0.8	2.0E-08	AF032897.1	NT	Homo sapiens potassium channel subunit (HERG-3) mRNA, complete cds
4306	17045	29670	3.21	2.0E-08	4756331	NT	Homo sapiens fatty-acid-Coenzyme A ligase, long-chain 4 (FACL4) mRNA
4776	17508	30129	1.34	2.0E-08	AF218902.1	NT	Homo sapiens attractin precursor (ATRIN) gene, exon 18
4776	17508	30130	1.34	2.0E-08	AF218902.1	NT	Homo sapiens attractin precursor (ATRIN) gene, exon 18
5131	17849	30486	1.39	2.0E-08	4756975	NT	Homo sapiens protein tyrosine kinase 2 beta (PTK2B) mRNA
5292	18067	30757	4.03	2.0E-08	7706512	NT	Homo sapiens PDZ domain-containing guanine nucleotide exchange factor 1 (LOC51735), mRNA
6557	18322	32328	1.15	2.0E-08	4505798	NT	Homo sapiens phosphatidylinositol 3-kinase, class 2, alpha polypeptide (PIK3C2A) mRNA
7523	20194	33286	1.07	2.0E-08	11431271	NT	Homo sapiens hypothetical protein FLJ10488 (FLJ10488), mRNA
7523	20194	33287	1.07	2.0E-08	11431271	NT	Homo sapiens hypothetical protein FLJ10488 (FLJ10488), mRNA
8506	21198	34342	4.94	2.0E-08	11428813	NT	Homo sapiens SH3-domain GRB2-like 2 (SH3GL2), mRNA
8506	21198	34343	4.94	2.0E-08	11428813	NT	Homo sapiens SH3-domain GRB2-like 2 (SH3GL2), mRNA
8591	21283	34421	0.58	2.0E-08	L76966.1	NT	Homo sapiens NIKAT4b mRNA, complete cds
8591	21283	34422	0.58	2.0E-08	L76966.1	NT	Homo sapiens NIKAT4b mRNA, complete cds
9437	22115	35280	1.48	2.0E-08	X12884.1	NT	H. sapiens arginase gene exon 3 (EG 3.5.3.1)
10313	22960		1.37	2.0E-08	7705898	NT	Homo sapiens AIM-1 protein (LOC51151), mRNA
11155	23822	37103	1.42	2.0E-08	U22028.1	NT	Human cytochrome P450 (CYP2A13) gene, complete cds
396	13181	25829	16.4	1.0E-08	A1862007.1	EST_HUMAN	hw3804.x1 NCL_CGAP_UH Homo sapiens cDNA clone IMAGE:2281743 3' similar to SW:RL2B_HUMAN
442	13228	25871	2.12	1.0E-08	AW986611.1	EST_HUMAN	P28316 60S RIBOSOMAL PROTEIN L23A ;
							PMO-BN0005-100300-001-c06 BN0005 Homo sapiens cDNA
1789	14529	27237	11.24	1.0E-08	N49818.1	EST_HUMAN	Y2305.r1 Soares fetal liver spleen 1NLS Homo sapiens cDNA clone IMAGE:243585 5' similar to PIR:S64204 S64204 ribosomal protein L29 - human ;

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## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5234	18040	30868	3.4	1.0E-08	AA195894.1	EST_HUMAN	z98809.r1 Stratiogene muscle 937209 Homo sapiens cDNA clone IMAGE:628240 5' similar to TR:G806562
5482	18281	31178	1.1	1.0E-08	BE380827.1	EST_HUMAN	G806562 NEBULIN ;
5482	18281	31179	1.1	1.0E-08	BE380827.1	EST_HUMAN	601284986F1 NIH_MGC 44 Homo sapiens cDNA clone IMAGE:3606992 5'
8899	21587	34728	2.7	1.0E-08	AF141348.1	NT	601284986F1 NIH_MGC 44 Homo sapiens cDNA clone IMAGE:3606992 5'
8899	21587	34727	2.7	1.0E-08	AF141349.1	NT	Homo sapiens beta-tubulin mRNA, complete cds
5728	18520	31441	0.88	9.0E-09	AI905004.1	EST_HUMAN	Homo sapiens beta-tubulin mRNA, complete cds
5728	18520	31442	0.88	9.0E-09	AI905004.1	EST_HUMAN	QV-8T073-191298-012 BT073 Homo sapiens cDNA
5949	18731	31691	4.21	9.0E-09	AW988635.1	EST_HUMAN	QV-8T073-191298-012 BT073 Homo sapiens cDNA
11069	23736	37009	2.75	9.0E-08	AK78829.1	EST_HUMAN	EST380711 IMAGE resequences, MAGJ Homo sapiens cDNA
11069	23736	37010	2.75	9.0E-08	AK78829.1	EST_HUMAN	tm89k07.x1 NCL_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2163421 3' similar to SW:BD_HUMAN
11390	23898	37288	2.13	9.0E-09	AA134604.1	EST_HUMAN	P55957 BH3 INTERACTING DOMAIN DEATH AGONIST ;
8827	21319	34461	1.98	8.0E-09	9635487	NT	z980402.r1 Stratiogene lung carcinoma 837218 Homo sapiens cDNA clone IMAGE:2163421 3' similar to SW:BD_HUMAN
5743	18536	31468	10.03	7.0E-09	AF038808.1	NT	TR:G862904 G862904 GPI-ANCHORED PROTEIN P137 ;
11010	24208	37532	2.99	7.0E-09	AF001886.1	NT	Homo endogenous retrovirus, complete genome
459	13244	25888	1.89	8.0E-09	U10991.1	NT	Homo sapiens ocellin (hLn) gene, exon 5
3988	16618	29258	1.15	8.0E-09	AW976394.1	EST_HUMAN	Homo sapiens NK-receptor (KIR-G2) gene, linker region exon
4699	17433	30064	1.21	8.0E-09	4802600	NT	Human G2 protein mRNA, partial cds
8503	19298	32270	0.72	8.0E-09	7706136	NT	EST388473 IMAGE resequences, MAGN Homo sapiens cDNA
8578	19341	32354	1.01	8.0E-09	L43610.1	NT	Homo sapiens CD34 antigen (CD34) mRNA
8578	19341	32355	1.01	8.0E-09	L43610.1	NT	Homo sapiens GAP-like protein (LOC51308), mRNA
8003	20898	33828	1.18	8.0E-09	X99101.1	NT	Homo sapiens polycystic kidney disease (PKD1) gene, exons 27-30
8022	20717	33849	0.53	8.0E-09	6801689	NT	Homo sapiens polycystic kidney disease (PKD1) gene, exons 27-30
8863	21355	34502	2.28	8.0E-09	AB036429.1	NT	Hi.sapiens mRNA for estrogen receptor
8762	21454	34802	3.33	8.0E-09	AF080255.1	NT	Homo sapiens erythrin-like with transmembrane domains 1 (ANKTM1), mRNA
8762	21454	34803	3.33	8.0E-09	AF080255.1	NT	Homo sapiens NDST4 mRNA for N-deacetylaseN-sulfotransferase 4, complete cds
8821	21513	34857	0.6	8.0E-09	11431964	NT	Homo sapiens iodester protein mRNA, complete cds
8821	21513	34858	0.6	8.0E-09	11431964	NT	Homo sapiens iodester protein mRNA, complete cds
10820	23313	36553	3.89	8.0E-09	11626299	NT	Homo sapiens Inositol 1,4,5-triphosphate receptor, type 1 (ITPR1), mRNA
11433	23200	36431	2.01	8.0E-09	9810279	NT	Homo sapiens BH3 interacting domain death agonist (BID), mRNA
11433	23200	36432	2.01	8.0E-09	9810279	NT	Homo sapiens UDP-glucose:glycoprotein glucosyltransferase 1 (HUGT1), mRNA

Table 4

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1957	14993	27406	1.38	5.0E-09	Y11385.1	NT	H.sepiens IMPA gene, exon 8
4526	17261	28895	1.56	5.0E-09	AF098990.1	NT	Homo sapiens T cell receptor beta locus, TCRBV7S3A2 to TCRBV12S2 region
12208	24674		2.81	5.0E-09	BE800177.1	EST_HUMAN	801513157F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3914391 5'
8220	20814		4.88	3.0E-09	M85896.1	NT	Human E2AFHLA fusion protein (E2AFHLF) mRNA, complete cds
1217	13988		6.88	2.0E-09	AW274792.1	EST_HUMAN	xp09000.x1 NCI_CGAP_JH9 Homo sapiens cDNA clone IMAGE:2739874 3' similar to gb:M31212 MYOSIN LIGHT CHAIN ALKALI, NON-MUSCLE ISOFORM (HUMAN);
3253	18015	28696	1.29	2.0E-09	M30638.1	NT	Human Ku (p70/p80) subunit mRNA, complete cds
4506	17241	28874	1.04	2.0E-09	AF095703.1	NT	Homo sapiens short chain L-3-hydroxyacyl-CoA dehydrogenase precursor (HADHSC) gene, nuclear gene encoding mitochondrial protein, complete cds
7574	20243	33348	0.58	2.0E-09	AF257737.1	NT	Homo sapiens ciliary dynein heavy chain 8 (DNAH8) mRNA, complete cds
8808	21300	34444	9.55	2.0E-09	W23507.1	EST_HUMAN	zb46d06.f1 Soares_fetal_Jung_NibHL19W Homo sapiens cDNA clone IMAGE:309635 5' similar to gb:M15182 BETA-GLUCURONIDASE PRECURSOR (HUMAN);
9050	21739	34897	0.78	2.0E-09	R78264.1	EST_HUMAN	y81b09.f1 Soares_placenta_Nb2HP Homo sapiens cDNA clone IMAGE:145825 5'
11049	23719	36990	3.39	2.0E-09	AF247457.2	NT	Homo sapiens myosin X (MYO10) mRNA, complete cds
11798	24378	37708	1.46	2.0E-09	10863980	NT	Homo sapiens potassium channel, subfamily K, member 10 (KCNK10), mRNA
307	13111	25751	1.63	1.0E-09	AF114487.1	NT	Homo sapiens interectin long isoform (ITSN) mRNA, complete cds
370	13106	25909	1.02	1.0E-09	11526150	NT	Homo sapiens GA-binding protein transcription factor, alpha subunit (GBPA), mRNA
1400	14147	26828	2.08	1.0E-09	M30638.1	NT	Human Ku (p70/p80) subunit mRNA, complete cds
1549	14295	26981	2.84	1.0E-09	AF192523.1	NT	Homo sapiens truncated Niemann-Pick C3 protein (NPC3) mRNA, complete cds
1549	14295	26982	2.84	1.0E-09	AF192523.1	NT	Homo sapiens truncated Niemann-Pick C3 protein (NPC3) mRNA, complete cds
1920	14657	27397	1.41	1.0E-09	4503730	NT	Homo sapiens FK506-binding protein 6 (36kD) (FKBP6) mRNA, and translated products
1920	14657	27398	1.41	1.0E-09	4503730	NT	Homo sapiens FK506-binding protein 6 (36kD) (FKBP6) mRNA, and translated products
3083	15848	28499	1.38	1.0E-09	J03171.1	NT	Human interferon-alpha receptor (HuIFN-alpha-Rec) mRNA, complete cds
4347	17086	28715	2.82	1.0E-09	AF088018.1	NT	Homo sapiens fatty acid amide hydrolase (FAAH) gene, exon 14
4347	17086	28716	2.82	1.0E-09	AF088018.1	NT	Homo sapiens fatty acid amide hydrolase (FAAH) gene, exon 14
5658	19453	31367	0.68	1.0E-09	7982349	NT	Homo sapiens cell recognition molecule Caspr2 (KIAA0898), mRNA
6707	19622	32895	1.28	1.0E-09	11421007	NT	Homo sapiens glycine receptor, alpha 2 (GLRA2), mRNA
6707	19622	32896	1.28	1.0E-09	11421007	NT	Homo sapiens glycine receptor, alpha 2 (GLRA2), mRNA
7039	25104	32789	0.78	1.0E-09	X98022.1	NT	H.sepiens EG-AP gene exon 2
9099	21787		1.49	1.0E-09	11419721	NT	Homo sapiens ALEX1 protein (LOC51308), mRNA
9420	22098	35270	1.71	1.0E-09	AW340174.1	EST_HUMAN	hd02h02.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2908371 3' similar to TR:O02711
11084	23754	37029	2.01	1.0E-09	7427514	NT	O02711 PRO-POL-OUTPASE POLYPROTEIN ;
11084	23754	37030	2.01	1.0E-09	7427514	NT	Homo sapiens huntingtin interacting protein 1 (HIP1), mRNA
11084	23754	37030	2.01	1.0E-09	7427514	NT	Homo sapiens huntingtin interacting protein 1 (HIP1), mRNA

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## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11141	23808	37088	1.8	1.0E-98	5901879	NT	Homo sapiens heat shock transcription factor 2 binding protein (HSF2BP), mRNA
11350	24040	37343	2.77	1.0E-98	AB023222.1	NT	Homo sapiens mRNA for KIAA1005 protein, partial cds
11984	24525		6.88	1.0E-98	AF240786.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
1	12830	28443	0.95	1.0E-100	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
2	12830	25443	1.53	1.0E-100	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
66	12894	25526	1.54	1.0E-100	11418230	NT	Homo sapiens Testis-specific XK-related protein on Y (XKRY), mRNA
66	12894	25527	1.54	1.0E-100	11418230	NT	Homo sapiens Testis-specific XK-related protein on Y (XKRY), mRNA
85	12911	25550	0.89	1.0E-100	AW275237.1	EST_HUMAN	Homo sapiens Testis-specific XK-related protein on Y (XKRY), mRNA
165	12979	25618	1.24	1.0E-100	AL163206.2	NT	X778611.x1 NCI_CGAP_Bri83 Homo sapiens cDNA clone IMAGE:2824605 3'
309	13113	25753	0.83	1.0E-100	AL163249.2	NT	Homo sapiens chromosome 21 segment HS21C048
334	13135	25770	3.06	1.0E-100	T05087.1	EST_HUMAN	EST02875 Fetal brain, Stratiene (cat#036208) Homo sapiens cDNA clone HFBCCR32
427	13213		1.28	1.0E-100	AF003528.1	NT	Homo sapiens X-linked arylidic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
477	13263		7.19	1.0E-100	X89631.1	NT	G. gorilla DNA for ZNF80 gene homolog
490	13280	25915	1.33	1.0E-100	BE180609.1	EST_HUMAN	RC3-H1T0625-040500-022-b09 HT0625 Homo sapiens cDNA
998	13758	26418	3.22	1.0E-100	7001693	NT	Homo sapiens DKFZP586M0122 protein (DKFZP586M0122), mRNA
998	13758	26419	3.22	1.0E-100	7001693	NT	Homo sapiens DKFZP586M0122 protein (DKFZP586M0122), mRNA
1415	14163	26846	3.14	1.0E-100	BF530735.1	EST_HUMAN	602072094F1 NCI_CGAP_Bri67 Homo sapiens cDNA clone IMAGE:4215039 5'
1538	14285		1.14	1.0E-100	AW207555.1	EST_HUMAN	UHL-B11-efk-c-07-Q.U.1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2722104 3'
1543	14289	26976	1.81	1.0E-100	A1200857.1	EST_HUMAN	qf8209.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1754633 3' similar to SW:CYT_COTJA
1850	14394	27309	1.41	1.0E-100	AB032694.1	NT	P81061 CYSTATIN 1
2238	14986		1.39	1.0E-100	D83349.1	NT	Homo sapiens mRNA for KIAA1168 protein, partial cds
2439	15159	27894	1.33	1.0E-100	X62468.1	NT	Rat mRNA for short type PB-cadherin, complete cds
2710	15417	28156	2.36	1.0E-100	D11078.1	NT	H. sapiens mRNA for IFN-gamma (pKC-O)
3018	15784		5.5	1.0E-100	11418976	NT	Homo sapiens KIAA0657 protein (KIAA0657), mRNA
4186	16927	29558	1.52	1.0E-100	AF057354.1	NT	Homo sapiens RGH2 gene, retrovirus-like element
4211	16962	29676	2.14	1.0E-100	4503792	NT	Homo sapiens myotubularin-related protein 1a mRNA, partial cds
4418	17154	29785	1.03	1.0E-100	AF036943.1	NT	Homo sapiens follicle stimulating hormone receptor (FSHR) mRNA
5031	17751	30362	2.66	1.0E-100	5032104	NT	Homo sapiens myelin transcription factor 1-like (MYT1-L) mRNA, complete cds
5031	17751	30363	2.66	1.0E-100	5032104	NT	Homo sapiens small optic lobes (Drosophila) homolog (SOLH) mRNA
5207	18015	30637	1.62	1.0E-100	BF244218.1	EST_HUMAN	Homo sapiens small optic lobes (Drosophila) homolog (SOLH) mRNA

Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6421	18220	30831	0.59	1.0E-100	AW075983.1	EST_HUMAN	xa8201.x1 NCI_CGAP_CML1 Homo sapiens cDNA clone IMAGE:2573305 3' similar to gb:X12433
6414	18410	31323	1.33	1.0E-100	AU118182.1	EST_HUMAN	PROTEIN PHPS1-2 (HUMAN);
5660	18455	31369	1.28	1.0E-100	AF135118.1	NT	AU118182 HEMBA1 Homo sapiens cDNA clone HEMBA1003046 5'
5747	18539	31461	0.8	1.0E-100	X14690.1	NT	Homo sapiens NF-E2-related factor 3 gene, complete cds
6071	18550	31814	0.94	1.0E-100	4557568	NT	Human mRNA for plasma inter-alpha-1-trypsin inhibitor heavy chain H(3)
6071	18550	31815	0.94	1.0E-100	4557568	NT	Homo sapiens ER to nucleus signalling 1 (ERN1) mRNA
6343	19113		1.67	1.0E-100	572967	NT	Homo sapiens ER to nucleus signalling 1 (ERN1) mRNA
6405	19174	32173	5.64	1.0E-100	AU140214.1	EST_HUMAN	Homo sapiens hest domain and RLD 2 (HERC2), mRNA
6457	19224	32224	1.97	1.0E-100	AU136800.1	EST_HUMAN	AU140214 PLACE2 Homo sapiens cDNA clone PLACE2000137 5'
6586	19349	32362	1.37	1.0E-100	R10887.1	EST_HUMAN	AU136800 PLACE1 Homo sapiens cDNA clone PLACE1005089 5'
6670	19587	32622	0.9	1.0E-100	7382479	NT	Y38c08.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:129134 3'
6742	19578	32608	1.19	1.0E-100	AA496841.1	EST_HUMAN	Homo sapiens Rho GTPase activating protein 6 (ARHGAP6), transcript variant 4, mRNA
6742	19578	32609	1.19	1.0E-100	AA496841.1	EST_HUMAN	see3306.r1 Geesler Wilms tumor Homo sapiens cDNA clone IMAGE:897587 5' similar to TR:G487418
6786	19630	32557	1.13	1.0E-100	BF376478.1	EST_HUMAN	G487418 ACTIN FILAMENT-ASSOCIATED PROTEIN ;
6786	19630	32558	1.13	1.0E-100	BF376478.1	EST_HUMAN	see3306.r1 Geesler Wilms tumor Homo sapiens cDNA clone IMAGE:897587 5' similar to TR:G487418
6793	19637	32565	6.76	1.0E-100	X04571.1	NT	G487418 ACTIN FILAMENT-ASSOCIATED PROTEIN ;
8430	21123	34281	7.17	1.0E-100	BF103863.1	EST_HUMAN	MR1-TN0046-090900-004-b05 TN0046 Homo sapiens cDNA
8488	21168		4.8	1.0E-100	AL163203.2	NT	MR1-TN0046-090900-004-b05 TN0046 Homo sapiens cDNA
8912	21903	34746	0.68	1.0E-100	AU119651.1	EST_HUMAN	MR1-TN0046-090900-004-b05 TN0046 Homo sapiens cDNA
8912	21903	34747	0.68	1.0E-100	AU119651.1	EST_HUMAN	Human mRNA for kidney epidermal growth factor (EGF) precursor
9132	21820	34988	3.62	1.0E-100	AB040918.1	NT	601647357F1 NIH_MGC_61 Homo sapiens cDNA clone IMAGE:3931310 5'
9210	22089		2.78	1.0E-100	AB972388.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C003
9333	20404	33520	1.82	1.0E-100	AW098961.1	EST_HUMAN	AU119651 HEMBA1 Homo sapiens cDNA clone HEMBA1000343 5'
9386	22048		7.61	1.0E-100	AU127720.1	EST_HUMAN	AU119651 HEMBA1 Homo sapiens cDNA clone HEMBA1000343 5'
9483	22136	35316	2.11	1.0E-100	AB046848.1	NT	Homo sapiens mRNA for KIAA1485 protein, partial cds
9483	22136	35317	2.11	1.0E-100	AB046848.1	NT	Homo sapiens mRNA for KIAA1485 protein, partial cds
9743	22394	35508	1.68	1.0E-100	AW630487.1	EST_HUMAN	h83c11.y1 NCI_CGAP_GU1 Homo sapiens cDNA clone IMAGE:2969388 5'
9743	22394	35509	1.68	1.0E-100	AW630487.1	EST_HUMAN	h83c11.y1 NCI_CGAP_GU1 Homo sapiens cDNA clone IMAGE:2969388 5'
9905	22554	35749	0.49	1.0E-100	AV732101.1	EST_HUMAN	AV732101 HTF Homo sapiens cDNA clone HTFBIG01 6'
10368	23014	36230	1.47	1.0E-100	BF347519.1	EST_HUMAN	602026554F1 NCI_CGAP_Brm67 Homo sapiens cDNA clone IMAGE:4156166 5'

Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10458	23104		2.2	1.0E-100	Y10391.1	NT	Human endogenous retrovirus HERV-K, pol gene
10658	23349	36586	6.27	1.0E-100	BF327282.1	EST_HUMAN	MIR0-BN0070-270300-008-h11 BN0070 Homo sapiens cDNA
11328	24017	37319	4.52	1.0E-100	AF111170.3	NT	Homo sapiens 14q32 Jagged2 gene, complete cds; and unknown gene
11328	24017	37320	4.52	1.0E-100	AF111170.3	NT	Homo sapiens 14q32 Jagged2 gene, complete cds; and unknown gene
11358	12830	25443	2.11	1.0E-100	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
11633	24230		1.59	1.0E-100	AW875464.1	EST_HUMAN	Homo sapiens golgin-like protein (GLP) gene, complete cds
11681	24276		1.48	1.0E-100	AF268285.1	NT	z889a03.r1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:489064 5'
11749	24340	37668	1.57	1.0E-100	AA115605.1	EST_HUMAN	z889a03.r1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:489064 5'
11749	24340	37669	1.57	1.0E-100	AA115605.1	EST_HUMAN	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
11907	24471	37806	6.67	1.0E-100	AF240780.1	NT	7q88h03.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE: 3' similar to TR:Q21997 Q21997
12031	25278		1.51	1.0E-100	BF446549.1	EST_HUMAN	COSMID R151, [2] TR:Q8UA08 ;
12200	24668	31071	3.67	1.0E-100	11545732	NT	Homo sapiens SH3-domain binding protein 1 (SH3BP1), mRNA
12792	25044	30968	4.62	1.0E-100	11417874	NT	Homo sapiens transcobalamin II; macrocytic anemia (TCN2), mRNA
75	12902	25539	1.75	1.0E-101	7110714	NT	Homo sapiens SEC14 (S. cerevisiae)-like 2 (SEC14L2), mRNA
75	12902	25540	1.75	1.0E-101	7110714	NT	Homo sapiens SEC14 (S. cerevisiae)-like 2 (SEC14L2), mRNA
671	13447	20087	1.62	1.0E-101	AB007915.2	NT	Homo sapiens mRNA for KIAA0446 protein, partial cds
688	13463	26111	5.88	1.0E-101	7110734	NT	Homo sapiens ventral anterior homeobox 2 (VAX2), mRNA
688	13463	26112	5.88	1.0E-101	7110734	NT	Homo sapiens ventral anterior homeobox 2 (VAX2), mRNA
754	13526	26185	1.99	1.0E-101	7657454	NT	Homo sapiens pascadillo (zabrafish) homolog 1, containing BRCT domain (PES1), mRNA
833	13603	26273	1.5	1.0E-101	4503914	NT	Homo sapiens phosphoribosylglycinamide formyltransferase, phosphoribosylglycinamide synthetase, phosphoribosylhydrazide synthetase (GART) mRNA
904	13671	26335	1.22	1.0E-101	Z20656.1	NT	Homo sapiens of cardiac alpha-myosin heavy chain gene
904	13729	26396	14.26	1.0E-101	BF681218.1	EST_HUMAN	602156474F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4287291 5'
1030	13790	26449	1.63	1.0E-101	A1221878.1	EST_HUMAN	q989c09.x1 Soares_NFL_T_OBC_S1 Homo sapiens cDNA clone IMAGE:1843336 3'
1577	14324	27012	1.46	1.0E-101	5921460	NT	Homo sapiens butyrophilin, subfamily 2, member A1 (BTN2A1), mRNA
1577	14324	27013	1.46	1.0E-101	5921460	NT	Homo sapiens butyrophilin, subfamily 2, member A1 (BTN2A1), mRNA
1740	14482	27182	1.52	1.0E-101	7662183	NT	Homo sapiens KIAA0559 gene product (KIAA0559), mRNA
1740	14482	27183	1.52	1.0E-101	7662183	NT	Homo sapiens KIAA0559 gene product (KIAA0559), mRNA
1938	14673	27389	1.62	1.0E-101	4502896	NT	Homo sapiens carboxypeptidase A1 (pancreatic) (CPA1) mRNA
2050	14783	27510	1.79	1.0E-101	BE843070.1	EST_HUMAN	RC3-ST0281-1(60600-016-h06 ST0281 Homo sapiens cDNA
2349	15592	27808	1.71	1.0E-101	5728892	NT	Homo sapiens A kinase (PRKA) anchor protein 6 (AKAP6), mRNA
2620	15332	28076	2.8	1.0E-101	X72993.1	NT	H. sapiens EWS gene, exon 5



Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2747	15452	28192	1.09	1.0E-101	AJ237744.1	NT	Homo sapiens RIBIIR gene (partial), exon 12
2747	15452	28193	1.09	1.0E-101	AJ237744.1	NT	Homo sapiens RIBIIR gene (partial), exon 12
2955	15721		13.73	1.0E-101	AJ262312.1	NT	Homo sapiens genome downstream Rhesus box
3198	15961	29813	1.98	1.0E-101	4885270	NT	Homo sapiens gamma-glutamyltransferase 1 (GGT1) mRNA
3235	16997		2.27	1.0E-101	BF036327.1	EST_HUMAN	601458531F1 NIH_MGC_60 Homo sapiens cDNA clone IMAGE:3862086 5'
3375	16134	28790	1.93	1.0E-101	AW985558.1	EST_HUMAN	EST377628 MAGE resequences, MAGI Homo sapiens cDNA
3395	16452	28192	1.49	1.0E-101	AJ237744.1	NT	Homo sapiens RIBIIR gene (partial), exon 12
3395	16452	28193	1.49	1.0E-101	AJ237744.1	NT	Homo sapiens RIBIIR gene (partial), exon 12
3857	16907	29245	3.89	1.0E-101	AB022785.1	NT	Homo sapiens ASH2L gene, complete cds, similar to Drosophila ash2 gene
4974	17697	30304	1.16	1.0E-101	5921490	NT	Homo sapiens butyrophilin, subfamily 2, member A1 (BTN2A1), mRNA
4974	17697	30305	1.16	1.0E-101	5921490	NT	Homo sapiens butyrophilin, subfamily 2, member A1 (BTN2A1), mRNA
5235	18041	30699	1.22	1.0E-101	AW965139.1	EST_HUMAN	EST377212 MAGE resequences, MAGI Homo sapiens cDNA
5913	18698	31651	3.88	1.0E-101	7427512	NT	Homo sapiens cytoplasmic linker 2 (CYLN2), mRNA
5913	18698	31652	3.88	1.0E-101	7427512	NT	Homo sapiens cytoplasmic linker 2 (CYLN2), mRNA
6365	19358	32372	1.27	1.0E-101	11430734	NT	Homo sapiens carbonic anhydrase VII (CA7), mRNA
7173	19859		1.01	1.0E-101	11545780	NT	Homo sapiens hypothetical protein FLJ22087 (FLJ22087), mRNA
7220	19905	32977	5.57	1.0E-101	AF208970.1	NT	Homo sapiens Kruppel-type zinc finger protein (PEG3) mRNA, alternative splice form 4, partial cds
7220	19905	32978	5.57	1.0E-101	AF208970.1	NT	Homo sapiens Kruppel-type zinc finger protein (PEG3) mRNA, alternative splice form 4, partial cds
7376	20058	33136	7.48	1.0E-101	AW008475.1	EST_HUMAN	w55R12.x1 NCL CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2533487 3'
7474	20147		1.79	1.0E-101	BE257384.1	EST_HUMAN	601109217F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3349801 5'
7623	20289	33398	7.43	1.0E-101	BF330759.1	EST_HUMAN	RC1-BT0313-220700-018-112 BT0313 Homo sapiens cDNA
7813	20508	33631	0.84	1.0E-101	BE275821.1	EST_HUMAN	601121621F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3345889 5'
7813	20508	33632	0.84	1.0E-101	BE275821.1	EST_HUMAN	601121621F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3345889 5'
7954	20849	33772	2.88	1.0E-101	BF029174.1	EST_HUMAN	601784885F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3998837 5'
8221	20915	34050	0.67	1.0E-101	AW630070.1	EST_HUMAN	hh74g10.y1 NCL CGAP GU1 Homo sapiens cDNA clone IMAGE:2968578 5' similar to gb.J03143
8221	20915	34051	0.67	1.0E-101	AW630070.1	EST_HUMAN	INTERFERON-GAMMA RECEPTOR ALPHA CHAIN PRECURSOR (HUMAN);
8908	21599	34741	1.08	1.0E-101	AA036800.1	EST_HUMAN	hh74g10.y1 NCL CGAP GU1 Homo sapiens cDNA clone IMAGE:2968578 5' similar to gb.J03143
9229	21908	35080	0.83	1.0E-101	AB037772.1	NT	INTERFERON-GAMMA RECEPTOR ALPHA CHAIN PRECURSOR (HUMAN);
9229	21908	35081	0.83	1.0E-101	AB037772.1	NT	zic29g08.f1 Saccharomyces cerevisiae YNHPU Homo sapiens cDNA clone IMAGE:471898 5' similar to
9362	20432	33553	17.13	1.0E-101	X60069.1	NT	PIR:S54040 S54040 YD6335.03c protein - yeast;
9362	20432	33554	17.13	1.0E-101	X60069.1	NT	Homo sapiens mRNA for KIAA1351 protein, partial cds
							Homo sapiens mRNA for KIAA1351 protein, partial cds
							Human mRNA for pancreatic gamma-glutamyltransferase
							Human mRNA for pancreatic gamma-glutamyltransferase

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Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9375	21950	35123	17.01	1.0E-101	9845492	NT	Homo sapiens gamma-glutamyltransferase 1 (GGT1), transcript variant 3, mRNA
9957	22309	35906	6.24	1.0E-101	BE619887.1	EST_HUMAN	601472808T1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3875953 3'
9957	22309	35907	6.24	1.0E-101	BE619887.1	EST_HUMAN	601472808T1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3875953 3'
9794	22445	35950	0.72	1.0E-101	10863360	NT	Homo sapiens potassium channel, subfamily K, member 10 (KCNK10), mRNA
10308	22955	36171	1.49	1.0E-101	11429127	NT	Homo sapiens Janus kinase 2 (a protein tyrosine kinase) (JAK2), mRNA
10447	23083	36323	0.94	1.0E-101	BE973648.1	EST_HUMAN	601680825F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:3950887 5'
10447	23083	36324	0.94	1.0E-101	BE973648.1	EST_HUMAN	601680825F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:3950887 5'
							branched-chain alpha-keto acid dehydrogenase complex E1 alpha subunit [human, Genomic, 105 nt, segment 8 of 9]
10788	23471	36713	1.98	1.0E-101	S38327.1	NT	Homo sapiens mRNA for KIAA0819 protein, partial cds
11053	23723	36994	2.11	1.0E-101	AB020628.1	NT	tm58c01.x1 NC1_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2162304 3' similar to gb:M13361
11398	24004	37307	2.06	1.0E-101	AI590078.1	EST_HUMAN	HEPARIN-BINDING GROWTH FACTOR PRECURSOR 1 (HUMAN); tm58c01.x1 NC1_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2162304 3' similar to gb:M13361
11398	24004	37308	2.06	1.0E-101	AI590078.1	EST_HUMAN	HEPARIN-BINDING GROWTH FACTOR PRECURSOR 1 (HUMAN);
11763	24354	37696	1.31	1.0E-101	AI908168.1	EST_HUMAN	RC-BT163-230499-085 BT163 Homo sapiens cDNA
11763	24354	37687	1.31	1.0E-101	AI908168.1	EST_HUMAN	RC-BT163-230499-085 BT163 Homo sapiens cDNA
12461	24828		13.68	1.0E-101	AW939051.1	EST_HUMAN	QV1-DT0068-240200-085-401 DT0068 Homo sapiens cDNA
38	12868	25485	2	1.0E-102	AF012872.1	NT	Homo sapiens phosphatidylinositol 4-kinase 230 (p14K230) mRNA, complete cds
332	13133	25787	4.35	1.0E-102	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
758	13530	26190	1.59	1.0E-102	M10976.1	NT	Homo sapiens down-regulated in adenoma (DRA) mRNA
1095	13953	26512	2.8	1.0E-102	M10976.1	NT	Human endogenous retroviral DNA (4-1), complete retroviral segment
1245	13994	26680	1.67	1.0E-102	11437146	NT	Homo sapiens solute carrier family 2 (facilitated glucose transporter), member 9 (SLC2A9), mRNA
1245	13994	26681	1.67	1.0E-102	11437146	NT	Homo sapiens solute carrier family 2 (facilitated glucose transporter), member 9 (SLC2A9), mRNA
1281	14010	26678	0.99	1.0E-102	BE408447.1	EST_HUMAN	Homo sapiens reelin (RELN) mRNA
1398	14145	26823	119.7	1.0E-102	BE408447.1	EST_HUMAN	601290982F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3629901 5'
2307	15032	27769	1.88	1.0E-102	AI124689.1	EST_HUMAN	am60c10.x1 Johnston frontal cortex Homo sapiens cDNA clone IMAGE:1539954 3' similar to SW:GG95_HUMAN Q08379 GOLGN-95 ;
2307	15032	27770	1.88	1.0E-102	AI124689.1	EST_HUMAN	am60c10.x1 Johnston frontal cortex Homo sapiens cDNA clone IMAGE:1539954 3' similar to SW:GG95_HUMAN Q08379 GOLGN-95 ;
3061	15827	28472	1.32	1.0E-102	7661979	NT	SW:GG95_HUMAN Q08379 GOLGN-95 ;
3130	15896	28538	4.76	1.0E-102	AU141005.1	EST_HUMAN	Homo sapiens KIAA0187 gene product (KIAA0187), mRNA
3130	15896	28539	4.76	1.0E-102	AU141005.1	EST_HUMAN	AU141005 PLACE4 Homo sapiens cDNA clone PLACE4000650 5'
4207	16948	28574	1.57	1.0E-102	AL163207.2	NT	AU141005 PLACE4 Homo sapiens cDNA clone PLACE4000650 5'
4378	17115	29748	2.17	1.0E-102	BE251310.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C007 601107843F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3343882 5'

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5287	18092	30763	1.87	1.0E-102	AF067133.1	NT	Homo sapiens protein phosphatase-1 regulatory subunit 7 (PPP1R7) gene, exon 7
5663	18458		9.17	1.0E-102	AB034951.1	NT	Homo sapiens HSC54 mRNA for heat shock cognate protein 54, complete cds
5698	18492	31414	2.84	1.0E-102	7705398	NT	Homo sapiens histone deacetylase 7 (HDAC7), mRNA
5698	18492	31415	2.84	1.0E-102	7705398	NT	Homo sapiens histone deacetylase 7 (HDAC7), mRNA
5704	18498	31420	0.81	1.0E-102	11433046	NT	Homo sapiens histone deacetylase 7 (HDAC7), mRNA
							Homo sapiens histone deacetylase 7 (HDAC7), mRNA
6200	18976	31954	2.93	1.0E-102	AI459825.1	EST_HUMAN	Homo sapiens histone deacetylase 7 (HDAC7), mRNA
7036	19728	32785	0.75	1.0E-102	BE720323.1	EST_HUMAN	Homo sapiens histone deacetylase 7 (HDAC7), mRNA
7065	19756	32821	1.04	1.0E-102	BE398106.1	EST_HUMAN	Homo sapiens histone deacetylase 7 (HDAC7), mRNA
7255	19939	33014	8.23	1.0E-102	AJ238994.1	NT	Homo sapiens histone deacetylase 7 (HDAC7), mRNA
7524	20196	33288	2.48	1.0E-102	AV710738.1	EST_HUMAN	Homo sapiens histone deacetylase 7 (HDAC7), mRNA
8122	20816	33962	3.91	1.0E-102	BE763051.1	EST_HUMAN	Homo sapiens histone deacetylase 7 (HDAC7), mRNA
8201	20895	34032	1.32	1.0E-102	BE910555.1	EST_HUMAN	Homo sapiens histone deacetylase 7 (HDAC7), mRNA
8392	21085	34218	2.21	1.0E-102	AV694817.1	EST_HUMAN	Homo sapiens histone deacetylase 7 (HDAC7), mRNA
8392	21085	34219	2.21	1.0E-102	AV694817.1	EST_HUMAN	Homo sapiens histone deacetylase 7 (HDAC7), mRNA
8501	21193	34335	1.19	1.0E-102	AB007923.1	NT	Homo sapiens histone deacetylase 7 (HDAC7), mRNA
8629	21521	34667	0.63	1.0E-102	BE388063.1	EST_HUMAN	Homo sapiens histone deacetylase 7 (HDAC7), mRNA
8629	21521	34668	0.63	1.0E-102	BE388063.1	EST_HUMAN	Homo sapiens histone deacetylase 7 (HDAC7), mRNA
							Homo sapiens histone deacetylase 7 (HDAC7), mRNA
9150	21881	35049	0.52	1.0E-102	AI762859.1	EST_HUMAN	Homo sapiens histone deacetylase 7 (HDAC7), mRNA
9181	21851	35017	0.81	1.0E-102	AV755842.1	EST_HUMAN	Homo sapiens histone deacetylase 7 (HDAC7), mRNA
9221	21900	35069	2.28	1.0E-102	T70393.1	EST_HUMAN	Homo sapiens histone deacetylase 7 (HDAC7), mRNA
9221	21900	35070	2.28	1.0E-102	T70393.1	EST_HUMAN	Homo sapiens histone deacetylase 7 (HDAC7), mRNA
9311	21978	35151	3.79	1.0E-102	AU124629.1	EST_HUMAN	Homo sapiens histone deacetylase 7 (HDAC7), mRNA
10281	22929		0.69	1.0E-102	AF153715.1	NT	Homo sapiens histone deacetylase 7 (HDAC7), mRNA
10367	23013	36228	3.67	1.0E-102	AI905037.1	EST_HUMAN	Homo sapiens histone deacetylase 7 (HDAC7), mRNA
10367	23013	36229	3.67	1.0E-102	AI905037.1	EST_HUMAN	Homo sapiens histone deacetylase 7 (HDAC7), mRNA
							Homo sapiens histone deacetylase 7 (HDAC7), mRNA
10428	23074	36295	1.24	1.0E-102	AA970786.1	EST_HUMAN	Homo sapiens histone deacetylase 7 (HDAC7), mRNA
11008	23680	36837	2.56	1.0E-102	4507822	NT	Homo sapiens histone deacetylase 7 (HDAC7), mRNA
11008	23680	36838	2.56	1.0E-102	4507822	NT	Homo sapiens histone deacetylase 7 (HDAC7), mRNA
11290	23951	37248	1.55	1.0E-102	AA888875.1	EST_HUMAN	Homo sapiens histone deacetylase 7 (HDAC7), mRNA
11380	23987	37287	3.01	1.0E-102	BF359243.1	EST_HUMAN	Homo sapiens histone deacetylase 7 (HDAC7), mRNA

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11710	24305	37631	3.57	1.0E-102	U41302.1	NT	Human chromosome 18 creatine transporter (SLC6A8) and (GDM) paralogous genes, complete cds
11911	24475		3.52	1.0E-102	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
12450	24820	31023	4.88	1.0E-102	AW300862.1	EST_HUMAN	h07c12.x1 NCL_CGAP_Co20 Homo sapiens cDNA clone IMAGE:2666036 3'
67	12806	25528	1.19	1.0E-103	BE908158.1	EST_HUMAN	601500405F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3902305 5'
67	12806	25529	1.19	1.0E-103	BE908158.1	EST_HUMAN	601500405F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3902305 5'
68	12924	25661	10.6	1.0E-103	D67078.2	NT	Homo sapiens mRNA for KIAA0235 protein, partial cds
203	13016	26056	1.45	1.0E-103	5453783	NT	Homo sapiens nucleolar protein (KKE/D repeat) (NOP56) mRNA
900	13726	26389	0.79	1.0E-103	AJ279348.1	NT	Homo sapiens mRNA for pregnancy-associated plasma protein-E (PAPPE gene)
1221	13971	26643	10.23	1.0E-103	BE977541.1	EST_HUMAN	601485388F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3887878 5'
1591	14337	27026	3.76	1.0E-103	AF012672.1	NT	Homo sapiens phosphatidylinositol 4-kinase 230 (p4K230) mRNA, complete cds
1907	14644	27354	1.75	1.0E-103	7657922	NT	Homo sapiens smg GDS-ASSOCIATED PROTEIN (SMAP), mRNA
1908	14704	27420	1.44	1.0E-103	4502428	NT	Homo sapiens bone morphogenetic protein 8 (osteogenic protein 2) (BMP8) mRNA
1908	14704	27421	1.44	1.0E-103	4502428	NT	Homo sapiens bone morphogenetic protein 8 (osteogenic protein 2) (BMP8) mRNA
2303	15028	27795	1.15	1.0E-103	AU134991	EST_HUMAN	Homo sapiens PLAGE1 Homo sapiens cDNA clone PLACE1000965 5'
2492	15170	27809	1.33	1.0E-103	AF060598.1	NT	Homo sapiens promyelocytic leukemia zinc finger protein (PLZF) gene, complete cds
2603	15316	28055	1.23	1.0E-103	BF629378.1	EST_HUMAN	602041882F1 NCL_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4179429 5'
2603	15316	28056	1.23	1.0E-103	BF529378.1	EST_HUMAN	602041882F1 NCL_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4179429 5'
3064	15930		2.08	1.0E-103	BE744722.1	EST_HUMAN	601573113F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3834315 5'
3374	16133	28789	4.1	1.0E-103	AW268245.1	EST_HUMAN	UJ-HBW0- $\alpha$ -h-11-0-U1.s1 NCL_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:2733165 3'
3433	16189	28837	0.99	1.0E-103	AB040802.1	NT	Homo sapiens mRNA for KIAA1450 protein, partial cds
3737	16490		8.55	1.0E-103	AF023881.1	NT	Mus musculus cyclophilin A mRNA, complete cds
3774	16526	29185	1.23	1.0E-103	AA485683.1	EST_HUMAN	ab10d12.s1 Stragene lung (8037210) Homo sapiens cDNA clone IMAGE:840407 3' similar to contains element LTR10 repetitive element;
3810	16562	29195	1.72	1.0E-103	11430876	NT	Homo sapiens neuropilin 1 (NRP1), mRNA
3985	16733	29367	3.47	1.0E-103	T23683.1	EST_HUMAN	seq340 b4HB3MA-Cot109+10-Bio Homo sapiens cDNA clone b4HB3MA-Cot109+10-Bio-7 3'
6644	18632	31587	0.96	1.0E-103	BF568527.1	EST_HUMAN	602186023F1 NIH_MGC_45 Homo sapiens cDNA clone IMAGE:4310573 5'
6652	18639	31577	2.62	1.0E-103	AF179895.1	NT	Homo sapiens septin 2 (SEP2) mRNA, partial cds
6174	18951	31923	0.89	1.0E-103	11435053	NT	Homo sapiens KIAA0440 protein (KIAA0440), mRNA
6174	18951	31924	0.89	1.0E-103	11435053	NT	Homo sapiens KIAA0440 protein (KIAA0440), mRNA
6368	19137	32132	0.75	1.0E-103	AW954586.1	EST_HUMAN	EST366536 MAGC resequences, MAGC Homo sapiens cDNA
6368	19137	32133	0.75	1.0E-103	AW954586.1	EST_HUMAN	EST366536 MAGC resequences, MAGC Homo sapiens cDNA
6498	25092	32265	1.53	1.0E-103	AA781442.1	EST_HUMAN	q226d03.s1 Soarua_testis_NHT Homo sapiens cDNA clone 1391452 3'
6535	19301	32304	0.94	1.0E-103	AF053490.1	NT	Homo sapiens glycine receptor alpha 2 subunit (GLRA2) gene, exon 4

Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6618	19380	32396	1.48	1.0E-103	AI590071.1	EST_HUMAN	tm58b05.x1 NCL CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2162289 3' similar to TR:Q13769
6618	19380	32397	1.48	1.0E-103	AI590071.1	EST_HUMAN	Q13769 ANONYMOUS. ;
6747	17916	30579	1.53	1.0E-103	5032282	NT	tm58b05.x1 NCL CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2162289 3' similar to TR:Q13769
6747	17916	30580	1.53	1.0E-103	5032282	NT	Homo sapiens dystrophin (muscular dystrophy, Duchenne and Becker types), includes DXS142, DXS164, DXS208, DXS230, DXS239, DXS268, DXS270, DXS272 (DMD), transcript variant Dp427m, mRNA
6872	17949	30544	1.27	1.0E-103	11431100	NT	Homo sapiens dystrophin (muscular dystrophy, Duchenne and Becker types), includes DXS142, DXS164, DXS208, DXS230, DXS239, DXS268, DXS270, DXS272 (DMD), transcript variant Dp427m, mRNA
6935	19670	32716	0.99	1.0E-103	AJ289880.1	NT	Homo sapiens ribosomal protein L3-like (RPL3L), mRNA
7127	19815	32883	1.63	1.0E-103	AW095778.1	EST_HUMAN	Homo sapiens KIAA0831 gene (partial), XTS gene and LZTFL1 gene
7233	19918	32900	6.93	1.0E-103	BE748158.1	EST_HUMAN	EST377849 IMAGE resequences, MAGI Homo sapiens cDNA
7671	20335	33448	4.21	1.0E-103	AI590071.1	EST_HUMAN	601671637F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:3838545 5'
7671	20335	33447	4.21	1.0E-103	AI590071.1	EST_HUMAN	tm58b05.x1 NCL CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2162289 3' similar to TR:Q13769
8187	20881	34019	0.77	1.0E-103	T31080.1	EST_HUMAN	Q13769 ANONYMOUS. ;
8519	21211	34354	2.22	1.0E-103	AU140344.1	EST_HUMAN	EST27193 Human Brain Homo sapiens cDNA 5' and similar to None
8519	21211	34355	2.22	1.0E-103	AU140344.1	EST_HUMAN	AU140344 PLACE2 Homo sapiens cDNA clone PLACE2000374 5'
8804	21298	34439	1.1	1.0E-103	BF109244.1	EST_HUMAN	AU140344 PLACE2 Homo sapiens cDNA clone PLACE2000374 5'
9005	21696	34845	2.86	1.0E-103	6005921	NT	760603.x1 Scores NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3525064 3' similar to
9005	21695	34846	2.86	1.0E-103	6005921	NT	SW-PTNF_HUMAN Q16825 PROTEIN-TYROSINE PHOSPHATASE D1 ;
9046	21736	34891	1.16	1.0E-103	AA581086.1	EST_HUMAN	Homo sapiens triple functional domain (PTPRF interacting) (TRIO), mRNA
9088	21777	34941	5.04	1.0E-103	AA774980.1	EST_HUMAN	Homo sapiens triple functional domain (PTPRF interacting) (TRIO), mRNA
9162	21832	34995	0.58	1.0E-103	BE035842.1	EST_HUMAN	Homo sapiens triple functional domain (PTPRF interacting) (TRIO), mRNA
9162	21832	34996	0.56	1.0E-103	BE035842.1	EST_HUMAN	md13-c02.e1 NCL CGAP_OV1 Homo sapiens cDNA clone IMAGE:800162 3' similar to gb:U02426 28S
9658	22808	35811	1.44	1.0E-103	Z37976.1	NT	PROTEASE SUBUNIT 4 (HUMAN);
9658	22808	35811	1.44	1.0E-103	Z37976.1	NT	ae84d12.e1 Stragene schizo brain S11 Homo sapiens cDNA clone IMAGE:970871 3' similar to
9658	22808	35811	1.44	1.0E-103	Z37976.1	NT	gb:X03747.cds1 SODIUMPOTASSIUM-TRANSPORTING ATPASE BETA-1 (HUMAN);
9658	22808	35811	1.44	1.0E-103	Z37976.1	NT	QV2-NN0045-230800-322-b03 NN0045 Homo sapiens cDNA
9658	22808	35811	1.44	1.0E-103	Z37976.1	NT	QV2-NN0045-230800-322-b03 NN0045 Homo sapiens cDNA
9658	22808	35811	1.44	1.0E-103	Z37976.1	NT	QV2-NN0045-230800-322-b03 NN0045 Homo sapiens cDNA
9658	22808	35811	1.44	1.0E-103	Z37976.1	NT	Hi.sapiens mRNA for latent transforming growth factor-beta binding protein (LTBP-2)
9658	22808	35811	1.44	1.0E-103	Z37976.1	NT	EST375749 IMAGE resequences, MAGI Homo sapiens cDNA

Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10138	22786	35998	9.2	1.0E-103	A1878956.1	EST_HUMAN	au51g04.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2518326 5' similar to TR:015046 O16046 KIA0338;
10634	23328	36563	3.56	1.0E-103	A1792759.1	EST_HUMAN	002308.y5 NCI_OGAP_Lu5 Homo sapiens cDNA clone IMAGE:1522283 5' similar to TR:Q62084 Q62084 PHOSPHOLIPASE C NEIGHBORING;
10737	23424	36688	2.04	1.0E-103	11424061	NT	Homo sapiens AXL receptor tyrosine kinase (AXL), mRNA
10737	23424	36689	2.04	1.0E-103	11424061	NT	Homo sapiens AXL receptor tyrosine kinase (AXL), mRNA
10748	23434	36677	2.22	1.0E-103	AF149773.1	NT	Homo sapiens NOD1 protein (NOD1) gene, exons 1, 2, and 3
10748	23434	36678	2.22	1.0E-103	AF149773.1	NT	Homo sapiens NOD1 protein (NOD1) gene, exons 1, 2, and 3
10783	23476	36717	1.3	1.0E-103	X87831.2	NT	Homo sapiens mRNA for partial OCT/plestin-A2 protein
10793	23478	36718	1.3	1.0E-103	X87831.2	NT	Homo sapiens mRNA for partial OCT/plestin-A2 protein
11347	24037	37340	2.8	1.0E-103	AU136283.1	EST_HUMAN	AU136283 PLACE1 Homo sapiens cDNA clone PLACE1003923 5'
11423	23190	36421	10.74	1.0E-103	L43610.1	NT	Homo sapiens polycystic kidney disease (PKD1) gene, exons 27-30
11748	24339	37667	2.41	1.0E-103	BE644611.1	EST_HUMAN	7e68a10.x1 Soares NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3287610 3' similar to contains MER28 b3 MER29 repetitive element;
11937	24494		2.11	1.0E-103	11528291	NT	Homo sapiens hypothetical protein FLJ20454 (FLJ20454), mRNA
12128	24820	31081	2.83	1.0E-103	AB011369.1	NT	Homo sapiens gene for AF-4, complete cds
227	13039	25676	3.73	1.0E-104	AL037549.3	EST_HUMAN	DKFZp564H1072_r1 664 (synonym: hfr2) Homo sapiens cDNA clone DKFZp564H1072 5'
227	13039	25677	3.73	1.0E-104	AL037549.3	EST_HUMAN	DKFZp564H1072_r1 664 (synonym: hfr2) Homo sapiens cDNA clone DKFZp564H1072 5'
1881	14618	27328	2.18	1.0E-104	4502428	NT	Homo sapiens bone morphogenetic protein 8 (osteogenic protein 2) (BMP8) mRNA
2190	14919	27653	3.68	1.0E-104	AA132875.1	EST_HUMAN	zo2c08.s1 Stratagene colon (#637284) Homo sapiens cDNA clone IMAGE:587628 3' similar to gb:Z14116_mel1 CD59 GLYCOPROTEIN PRECURSOR (HUMAN);
2201	14929	27656	2.57	1.0E-104	BE744628.1	EST_HUMAN	601577460F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3928438 5'
2369	15091	27829	1.38	1.0E-104	BF334221.1	EST_HUMAN	RC1-CT0249-110900-214-f12 CT0249 Homo sapiens cDNA
2369	15091	27830	1.38	1.0E-104	BF334221.1	EST_HUMAN	RC1-CT0249-110900-214-f12 CT0249 Homo sapiens cDNA
2438	15158	27893	1.68	1.0E-104	5031570	NT	Homo sapiens ARP2 (actin-related protein 2, yeast) homolog (ACTR2), mRNA
2507	15224	27965	1.11	1.0E-104	7682125	NT	Homo sapiens KIAA0440 protein (KIAA0440), mRNA
2507	15224	27968	1.11	1.0E-104	7682125	NT	Homo sapiens KIAA0440 protein (KIAA0440), mRNA
2874	15941	28285	7.41	1.0E-104	M34671.1	NT	Human lymphocytic antigen CD59/MEM43 mRNA, complete cds
2917	15983		2.74	1.0E-104	Y1151.1	NT	H. sapiens gene encoding phenylpyruvate tautomerase II
3386	16145		2.04	1.0E-104	AA319496.1	EST_HUMAN	EST21658 Adrenal gland tumor Homo sapiens cDNA 5' end
3587	16341	28988	0.79	1.0E-104	AB033102.1	NT	Homo sapiens mRNA for KIAA1276 protein, partial cds
3587	16341	28987	0.79	1.0E-104	AB033102.1	NT	Homo sapiens mRNA for KIAA1276 protein, partial cds
3924	16874	28315	0.76	1.0E-104	AB033098.1	NT	Homo sapiens mRNA for KIAA1172 protein, partial cds
4344	17083	28712	3.93	1.0E-104	X02761.1	NT	Human mRNA for fibronectin (FN precursor)

Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4570	17305	29832	1.23	1.0E-104	AF231920.1	NT	Homo sapiens chromosome 21 unknown mRNA
4570	17305	29833	1.23	1.0E-104	AF231920.1	NT	Homo sapiens chromosome 21 unknown mRNA
5106	17824	30441	1.06	1.0E-104	7857038	NT	Homo sapiens death receptor 6 (DR6), mRNA
5850	18637	31573	1.28	1.0E-104	U43379.1	NT	Human Down Syndrome region of chromosome 21 DNA
5850	18637	31574	1.28	1.0E-104	U43379.1	NT	Human Down Syndrome region of chromosome 21 DNA
5897	18682	31630	1.12	1.0E-104	AB017332.1	NT	Homo sapiens alk3 mRNA for Aurora/Ip1-related kinase 3, complete cds
6375	19144	32141	9.51	1.0E-104	AJ768797.1	EST_HUMAN	wf03b12.x1 NCL CGAP_Kd12-Homo sapiens cDNA clone IMAGE:2401727 3' similar to TR:Q14145 Q14145 KIAA0132 PROTEIN, contains element LTR7 repetitive element;
6375	19144	32142	9.51	1.0E-104	AJ768797.1	EST_HUMAN	wf03b12.x1 NCL CGAP_Kd12-Homo sapiens cDNA clone IMAGE:2401727 3' similar to TR:Q14145 Q14145 KIAA0132 PROTEIN, contains element LTR7 repetitive element;
6531	19316	32322	0.75	1.0E-104	7706512	NT	Homo sapiens PDZ domain-containing guanine nucleotide exchange factor 1 (LOC51735), mRNA
6706	19621	32863	3.31	1.0E-104	BE314182.1	EST_HUMAN	601150451F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3503220 5'
6706	19621	32864	3.31	1.0E-104	BE314182.1	EST_HUMAN	601150451F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3503220 5'
7125	19813	32881	2.03	1.0E-104	11425572	NT	Homo sapiens adaptor-related protein complex 2, beta 1 subunit (AP2B1), mRNA
8495	21187	34330	0.83	1.0E-104	BF509244.1	EST_HUMAN	U1-H-B14-sow-b-09-0-U1.at NCL CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3086176 3'
9095	21754	34915	5.23	1.0E-104	BF448230.1	EST_HUMAN	nad16g11.x1 NCL CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3365048 3'
9163	21833	34997	0.5	1.0E-104	AA682308.1	EST_HUMAN	zj98b05.a1 Soares_fetal_liver_aplcn_1NFLS_S1 Homo sapiens cDNA clone IMAGE:462897 3'
9184	21854		1.31	1.0E-104	T74219.1	EST_HUMAN	yc83f02.f1 Soares Infant brain 1NIB Homo sapiens cDNA clone IMAGE:22440 5'
9214	21893	35060	4.27	1.0E-104	AF061395.1	NT	Homo sapiens Trio isoform mRNA, complete cds
9214	21893	35061	4.27	1.0E-104	AF061395.1	NT	Homo sapiens Trio isoform mRNA, complete cds
9341	20412	33529	4.4	1.0E-104	BF352841.1	EST_HUMAN	IL3-HT0619-080900-249-F07 HT0619 Homo sapiens cDNA
9341	20412	33530	4.4	1.0E-104	BF352841.1	EST_HUMAN	IL3-HT0619-080900-249-F07 HT0619 Homo sapiens cDNA
9654	22306	35503	0.85	1.0E-104	AW103848.1	EST_HUMAN	xd76802.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2603523 3' similar to TR:Q24116 Q24116 HYPOTHETICAL 29.4 KD PROTEIN.;
9654	22306	35504	0.85	1.0E-104	AW103848.1	EST_HUMAN	xd76802.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2603523 3' similar to TR:Q24116 Q24116 HYPOTHETICAL 29.4 KD PROTEIN.;
9847	22497	35698	0.71	1.0E-104	AF113514.1	NT	Homo sapiens histone acetyltransferase MORF mRNA, complete cds
9993	22641	35852	2.83	1.0E-104	BE791713.1	EST_HUMAN	601581503F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3835977 5'
9993	22641	35853	2.83	1.0E-104	BE791713.1	EST_HUMAN	601581503F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3835977 5'
10299	22946	36160	1.28	1.0E-104	AV728070.1	EST_HUMAN	AV728070 HTC Homo sapiens cDNA clone HTCBYA07 5'
10339	22986	36204	4.61	1.0E-104	AU130765.1	EST_HUMAN	AU130765 NT2RP3 Homo sapiens cDNA clone NT2RP3001368 5'
10450	23096	36327	4.41	1.0E-104	U66535.1	NT	Human beta4-integrin (ITGB4) gene, exons 19,20,21,22,23,24 and 25
10464	23110		0.92	1.0E-104	11427757	NT	Homo sapiens KIAA0849 gene product (KIAA0849), mRNA
11268	23930	37221	2.07	1.0E-104	BE720191.1	EST_HUMAN	RCO-HT0885-310700-021-008 HT0885 Homo sapiens cDNA

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Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11288	23930	37222	2.07	1.0E-104	BE720191.1	EST_HUMAN	RCO-HT0885-310700-021-b09 HT0885 Homo sapiens cDNA
11289	23959	37259	4.98	1.0E-104	BF684288.1	EST_HUMAN	602141215F1 NIH_MGC_48 Homo sapiens cDNA clone IMAGE:4302607 5'
11590	24189	37505	1.75	1.0E-104	BE731978.1	EST_HUMAN	601566806F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3841681 5'
11590	24189	37505	1.75	1.0E-104	BE731978.1	EST_HUMAN	601566806F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3841681 5'
11590	24189	37505	1.75	1.0E-104	BE731978.1	EST_HUMAN	601566806F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3841681 5'
11791	24381	37712	1.42	1.0E-104	11434728	NT	Homo sapiens ribosomal protein S8 kinase, 90kD, polypeptide 5 (RPS8KA5), mRNA
12702	24982		2.38	1.0E-104	BE383892.1	EST_HUMAN	601312161F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3958976 5'
272	16514	25722	11.13	1.0E-106	4502106	NT	Homo sapiens amyloid beta (A4) precursor protein (protease resistant-II, Alzheimer disease) (APP), mRNA
416	12827	26440	8.99	1.0E-105	4505150	NT	Homo sapiens Meis1 (mouse) homolog (MEIS1) mRNA
580	13360	25987	1.92	1.0E-105	AF032897.1	NT	Homo sapiens potassium channel subunit (HERG-3) mRNA, complete cds
580	13360	25988	1.92	1.0E-105	AF032897.1	NT	Homo sapiens potassium channel subunit (HERG-3) mRNA, complete cds
1814	14554	27289	0.91	1.0E-105	AF032897.1	NT	Homo sapiens chromosome 21 segment HS21C080
1919	14956	27366	1.93	1.0E-105	D50918.1	NT	Human mRNA for KIAA0128 gene, partial cds
2186	14915	27649	1.29	1.0E-105	AA318369.1	EST_HUMAN	EST20809 Spleen1 Homo sapiens cDNA 5' and similar to autoinhibitory antigen Ku, p70/p80 subunit
2322	15047		1.44	1.0E-105	BE891766.1	EST_HUMAN	601434491F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3916511 5'
3006	15772		2.89	1.0E-105	AJ28041.1	NT	Homo sapiens 959 kb contig between AML1 and GBR1 on chromosome 21q22; segment 1/3
3346	16106	28759	0.88	1.0E-105	7304922	NT	Homo sapiens bromodomain adjacent to zinc finger domain, 2B (BAZ2B), mRNA
3346	16106	28760	0.88	1.0E-105	7304922	NT	Homo sapiens bromodomain adjacent to zinc finger domain, 2B (BAZ2B), mRNA
4077	16821	29447	2.07	1.0E-105	AW601688.1	EST_HUMAN	EST1373761 IMAGE resequencing, MAGG Homo sapiens cDNA
4694	17428	30058	0.74	1.0E-105	BE868881.1	EST_HUMAN	601445823F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3850156 5'
4694	17428	30059	0.74	1.0E-105	BE868881.1	EST_HUMAN	601445823F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3850156 5'
4886	17613		4.24	1.0E-105	AL163208.2	NT	Homo sapiens chromosome 21 segment HS21C008
5043	17762	30377	1.16	1.0E-105	AB018339.1	NT	Homo sapiens mRNA for KIAA0799 protein, partial cds
5081	17810	30428	0.94	1.0E-105	AW66016.1	EST_HUMAN	EST1378088 IMAGE resequencing, MAGI Homo sapiens cDNA
5247	18053	30681	0.96	1.0E-105	AF016704.1	NT	Homo sapiens E5-AP ubiquitin-protein ligase (UBESA) gene, exon 2
5312	18116		1.07	1.0E-105	11420134	NT	Homo sapiens Radna-derived POU-domain factor-1 (RPF-1), mRNA
6804	19466	32485	2.16	1.0E-105	BF314302.1	EST_HUMAN	601601028F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4130334 5'
6804	19466	32488	2.16	1.0E-105	BF314302.1	EST_HUMAN	601601028F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4130334 5'
6885	17961	30515	3.66	1.0E-105	11419198	NT	Homo sapiens GTPase activating protein-like (GAPL), mRNA
6885	17961	30516	3.65	1.0E-105	11419198	NT	Homo sapiens GTPase activating protein-like (GAPL), mRNA
6927	19693	32709	0.83	1.0E-105	AW651634.1	EST_HUMAN	EST1336680 IMAGE resequencing, MAGB Homo sapiens cDNA
7184	19870	32944	0.59	1.0E-105	BE902616.1	EST_HUMAN	601677279F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3986010 5'
7722	20388	33500	0.95	1.0E-105	6806894	NT	Homo sapiens plakophilin 4 (PKP4), mRNA
7758	20454	33579	0.97	1.0E-105	X12556.1	NT	Human mRNA for dbi proto-oncogene



Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7827	20822	33750	8.55	1.0E-105	T05087.1	EST_HUMAN	EST02975 Fetal brain, Striatum (cat#836208) Homo sapiens cDNA clone HBCR32
8297	20991	34120	1.41	1.0E-105	AW007194.1	EST_HUMAN	w50c10.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2500628 3' similar to SW:ACSA_PENCH P36333 ACETYL-COENZYME A SYNTHETASE;
8826	21518	34693	0.88	1.0E-105	AW840817.1	EST_HUMAN	RC1-CN0008-070100-011-e05 CN0008 Homo sapiens cDNA
8948	21639	34786	2.82	1.0E-105	AW010879.1	EST_HUMAN	UIH-B10p-ab-b-12-0-UI.s1 NCI_CGAP_Sub2 Homo sapiens cDNA
9103	21791	34954	0.9	1.0E-105	AW882372.1	EST_HUMAN	QV2-OT0062-140300-063-008 OT0062 Homo sapiens cDNA
9103	21791	34955	0.9	1.0E-105	AW882372.1	EST_HUMAN	QV2-OT0062-140300-063-008 OT0062 Homo sapiens cDNA
9487	22077	35247	0.88	1.0E-105	BE867793.1	EST_HUMAN	601443755F1 NIH_MGC_85 Homo sapiens cDNA clone IMAGE:3847894 5'
9487	22077	35248	0.88	1.0E-105	BE867793.1	EST_HUMAN	601443755F1 NIH_MGC_85 Homo sapiens cDNA clone IMAGE:3847894 5'
10850	23531	36776	5.73	1.0E-105	AF254822.1	NT	Homo sapiens SMARCA4 isoform (SMARCA4) gene, complete cds, alternatively spliced
11195	23860	37146	1.59	1.0E-105	D63548.1	NT	Homo sapiens COL4A6 gene for $\alpha 1(V)$ collagen, exon 31
11250	23912	37204	2.98	1.0E-105	7705938	NT	Homo sapiens Ran binding protein 11 (LOC51194), mRNA
11580	24179	37494	2.58	1.0E-105	AW027554.1	EST_HUMAN	wv7487.x1 Soares_thymus_NHFT11 Homo sapiens cDNA clone IMAGE:2535301 3' similar to TR:P97892 P97892 PROTEASE;
11675	24270	37592	1.43	1.0E-105	BF430821.1	EST_HUMAN	7o18c10.x1 NCI_CGAP_Kd11 Homo sapiens cDNA clone IMAGE:3574291 3' similar to TR:P97680 P97680 RIN1.;
11831	24415	37753	1.73	1.0E-105	AB004924.1	NT	Homo sapiens gene for Smad3, exon 2 and 3
11831	24415	37754	1.73	1.0E-105	AB004924.1	NT	Homo sapiens gene for Smad3, exon 2 and 3
147	12982		1.39	1.0E-106	AW503208.1	EST_HUMAN	UI-HF-BN0-ald-g-07-0-UI.H1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3678348 5'
200	13013	25954	1.79	1.0E-106	AJ505065.1	EST_HUMAN	iq78c01.x1 NCI_CGAP_U11 Homo sapiens cDNA clone IMAGE:2215008 3'
529	13313	25947	2.68	1.0E-106	AW995556.1	EST_HUMAN	EST377629 MAGE resequences, MAGI Homo sapiens cDNA
591	13371	26000	0.76	1.0E-106	J00146.1	NT	Human dihydrofolate reductase pseudogene (psl-hd1)
592	13371	26000	2.08	1.0E-106	J00146.1	NT	Human dihydrofolate reductase pseudogene (psl-hd1)
1815	14282	26948	1.33	1.0E-106	AF145712.1	NT	Homo sapiens soluble neuropilin-1 mRNA, complete cds
1897	14440	27138	3.48	1.0E-106	U48724.1	NT	Human epidermal growth factor receptor (EGFR) precursor-mRNA, exon 4, partial cds
1796	14536	27245	4.71	1.0E-106	AA527446.1	EST_HUMAN	ng41c05.s1 NCI_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element LTR3 repetitive element;
1796	14536	27246	4.71	1.0E-106	AA527446.1	EST_HUMAN	ng41c05.s1 NCI_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element LTR3 repetitive element;
2118	14849	27578	2.31	1.0E-106	BE144286.1	EST_HUMAN	MRO-HT0165-140200-008-d10 HT0165 Homo sapiens cDNA
2315	15040	27778	2.89	1.0E-106	4504184	NT	Homo sapiens glutathione S-transferase theta 1 (GSTT1), mRNA
2610	15322	28064	1.82	1.0E-106	BE280201.1	EST_HUMAN	601149783F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3502461 5'
2761	15468	28210	3.24	1.0E-106	AJ276526.1	EST_HUMAN	q17h10.x1 Soares_NHIMPu_S1 Homo sapiens cDNA clone IMAGE:1878307 3'
2828	14159	28842	1.91	1.0E-106	4504184	NT	Homo sapiens glutathione S-transferase theta 1 (GSTT1), mRNA

Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2828	14159	28843	1.91	1.0E-108	4504184	NT	Homo sapiens glutathione S-transferase theta 1 (GSTT1), mRNA
2942	15707	28357	5.23	1.0E-108	AB037747.1	NT	Homo sapiens mRNA for KIAA1328 protein, partial cds
2942	15707	28358	5.23	1.0E-108	AB037747.1	NT	Homo sapiens mRNA for KIAA1328 protein, partial cds
3178	15938	28368	2.18	1.0E-108	8822885	NT	Homo sapiens hypothetical protein FLJ11273 (FLJ11273), mRNA
3178	15938	28369	2.18	1.0E-108	8822885	NT	Homo sapiens hypothetical protein FLJ11273 (FLJ11273), mRNA
3367	16128	28784	0.81	1.0E-108	AB008681.1	NT	Homo sapiens gene for activin receptor type IIB, complete cds
3434	16180	28838	1.18	1.0E-108	AB033104.1	NT	Homo sapiens mRNA for KIAA1278 protein, partial cds
3434	16180	28839	1.18	1.0E-108	AB033104.1	NT	Homo sapiens mRNA for KIAA1278 protein, partial cds
4017	16763	28391	7.95	1.0E-108	AW974650.1	EST_HUMAN	EST388875 MAGC resequences, MAGN Homo sapiens cDNA
4017	16763	28392	7.95	1.0E-108	AW974650.1	EST_HUMAN	EST388875 MAGC resequences, MAGN Homo sapiens cDNA
4035	16780	28410	1.05	1.0E-108	5728729	NT	Homo sapiens API5-like 1 (API5L1), mRNA
4562	17287	28924	1.4	1.0E-108	BE144286.1	EST_HUMAN	MRO-HT0185-140200-008-d10 HT0165 Homo sapiens cDNA
5135	17853	30469	1.09	1.0E-108	AL050253.1	NT	H. sapiens mRNA similar to D28763 mouse mRNA for seizure-related gene product 6. Shares domains with BMPs, Tcfid, Sushi repeat proteins
5135	17853	30470	1.09	1.0E-108	AL050253.1	NT	H. sapiens mRNA similar to D28763 mouse mRNA for seizure-related gene product 6. Shares domains with BMPs, Tcfid, Sushi repeat proteins
5285	18090	30750	2.61	1.0E-108	AA781155.1	EST_HUMAN	q24b09.s1 Scores testis_NHT Homo sapiens cDNA clone 1391225 3' similar to gb.X12433 PROTEIN
5784	18555	31480	0.58	1.0E-108	AU130113.1	EST_HUMAN	PHPS1-2 (HUMAN);
5784	18555	31481	0.58	1.0E-108	AU130113.1	EST_HUMAN	AU130113 NT2RP3 Homo sapiens cDNA clone NT2RP3000274 5'
5918	18605	31533	0.58	1.0E-108	AU130113.1	EST_HUMAN	AU130113 NT2RP3 Homo sapiens cDNA clone NT2RP3000274 5'
5904	18989	31637	1.3	1.0E-108	AU143428.1	EST_HUMAN	zw28d12.s1 Scores ovary tumor N6HOT Homo sapiens cDNA clone IMAGE:770615 3'
5904	18989	31638	1.3	1.0E-108	AU143428.1	EST_HUMAN	AU143428 Y79AA1 Homo sapiens cDNA clone Y79AA1001912 5'
6011	18792	31755	4.89	1.0E-108	BF679574.1	EST_HUMAN	AU143428 Y79AA1 Homo sapiens cDNA clone Y79AA1001912 5'
6303	18892	31890	0.77	1.0E-108	BE897112.1	EST_HUMAN	602154012F1 NIH_MGC 83 Homo sapiens cDNA clone IMAGE:4285067 5'
6326	19095	32083	17.88	1.0E-108	11545913	NT	601439670F1 NIH_MGC 72 Homo sapiens cDNA clone IMAGE:4285067 5'
6326	19095	32084	17.88	1.0E-108	11545913	NT	Homo sapiens xycyltransferase II (XT2), mRNA
7274	19855	33031	5.16	1.0E-108	AA683779.1	EST_HUMAN	Homo sapiens xycyltransferase II (XT2), mRNA
7324	20007	33084	5.33	1.0E-108	11428617	NT	ae72807.s1 Stralagene schizo brain S11 Homo sapiens cDNA clone IMAGE:980732 3' similar to gb.X65873 KINESIN HEAVY CHAIN (HUMAN);
7402	20080	33161	1.21	1.0E-108	BE28722.1	EST_HUMAN	KINESIN HEAVY CHAIN (HUMAN);
7511	20182	33275	9.29	1.0E-108	11425503	NT	Homo sapiens XPMC2 protein (LOC57109), mRNA
7511	20182	33276	9.29	1.0E-108	11425503	NT	Homo sapiens XPMC2 protein (LOC57109), mRNA
7714	20378	33491	0.87	1.0E-108	AU116850.1	EST_HUMAN	601105736F1 NIH_MGC 15 Homo sapiens cDNA clone IMAGE:2886345 5'

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7884	20579	33707	6.44	1.0E-106	BE741408.1	EST_HUMAN	601594331F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3948463 5'
7884	20579	33708	6.44	1.0E-106	BE741408.1	EST_HUMAN	601594331F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3948463 5'
8074	20768	33897	1.38	1.0E-106	AJ523066.1	EST_HUMAN	601594331F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3948463 5'
8527	21219	34361	0.47	1.0E-106	BE387850.1	EST_HUMAN	601594331F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3948463 5'
8527	21219	34362	0.47	1.0E-106	BE387850.1	EST_HUMAN	601594331F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3948463 5'
8607	21289	34443	3.84	1.0E-106	AJ654123.1	EST_HUMAN	601594331F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3948463 5'
8950	21641	34788	0.58	1.0E-106	AW538831.1	EST_HUMAN	601594331F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3948463 5'
9045	21735	34889	3.28	1.0E-106	AA825307.1	EST_HUMAN	601594331F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3948463 5'
9045	21735	34890	3.28	1.0E-106	AA825307.1	EST_HUMAN	601594331F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3948463 5'
9186	21858	35021	1.28	1.0E-106	AJ750447.1	EST_HUMAN	601594331F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3948463 5'
9329	21986	35189	1.8	1.0E-106	AJ78569.1	EST_HUMAN	601594331F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3948463 5'
9329	21986	35170	1.8	1.0E-106	AJ78569.1	EST_HUMAN	601594331F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3948463 5'
9802	22551	35748	1.19	1.0E-106	BE389234.1	EST_HUMAN	601594331F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3948463 5'
9884	22832	35841	1.09	1.0E-106	BF027310.1	EST_HUMAN	601594331F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3948463 5'
9884	22832	35842	1.09	1.0E-106	BF027310.1	EST_HUMAN	601594331F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3948463 5'
10141	22789	36003	6.22	1.0E-106	AA604417.1	EST_HUMAN	601594331F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3948463 5'
10141	22789	36004	6.22	1.0E-106	AA604417.1	EST_HUMAN	601594331F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3948463 5'
10185	22833	36047	1.6	1.0E-106	AW363296.1	EST_HUMAN	601594331F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3948463 5'
10358	23005	36222	0.53	1.0E-106	AL039888.1	EST_HUMAN	601594331F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3948463 5'
10479	23125	36354	2.81	1.0E-106	AL163202.2	EST_HUMAN	601594331F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3948463 5'
10812	23495	36730	7.1	1.0E-106	BF032755.1	EST_HUMAN	601594331F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3948463 5'
10812	23495	36731	7.1	1.0E-106	BF032755.1	EST_HUMAN	601594331F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3948463 5'
10995	23688	36925	2.22	1.0E-106	J05200.1	NT	601594331F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3948463 5'
10995	23688	36926	2.22	1.0E-106	J05200.1	NT	601594331F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3948463 5'
11394	23991	37292	1.91	1.0E-106	BE267385.1	EST_HUMAN	601594331F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3948463 5'
11532	24132	37436	1.36	1.0E-106	BE010882.1	EST_HUMAN	601594331F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3948463 5'
11532	24132	37437	1.36	1.0E-106	BE010882.1	EST_HUMAN	601594331F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3948463 5'
11981	25194	31088	6.77	1.0E-106	AW410405.1	EST_HUMAN	601594331F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3948463 5'
12183	24684	31088	3.32	1.0E-106	BE894488.1	EST_HUMAN	601594331F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3948463 5'

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12103	24664	31080	3.32	1.0E-106	BE804488.1	EST_HUMAN	601433087F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3918524 5'
12408	24791		4.6	1.0E-106	BE065905.1	EST_HUMAN	RC1-CT0249-090800-024-005 CT0249 Homo sapiens cDNA
228	13040		4.42	1.0E-107	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
258	13086		1.29	1.0E-107	X60459.1	NT	Human IFNAR gene for Interferon alpha/beta receptor
607	13385		4.03	1.0E-107	4828863	NT	Homo sapiens neuronal cell adhesion molecule (NRCAM) mRNA
616	13394	26028	1.89	1.0E-107	AF155103.1	NT	Homo sapiens NY-REN-25 antigen mRNA, partial cds
866	13635	28305	1.52	1.0E-107	X60459.1	NT	Human IFNAR gene for Interferon alpha/beta receptor
848	13714	26379	11.55	1.0E-107	AF154121.1	NT	Homo sapiens sodium-dependent high-affinity dicarboxylate transporter (NADC3) mRNA, complete cds
1255	14004	26673	0.73	1.0E-107	AB032253.1	NT	Homo sapiens BAZ1B mRNA for bromodomain adjacent to zinc finger domain 1B, complete cds
1562	14309	26896	3.77	1.0E-107	BF087405.1	EST_HUMAN	QV2-HT0540-120800-358-005 HT0540 Homo sapiens cDNA
1746	14488	27167	1.85	1.0E-107	AF135275.1	NT	Homo sapiens cathepsin Z precursor (GTSZ) gene, exon 3
1832	14571	27283	0.99	1.0E-107	AB007922.2	NT	Homo sapiens mRNA for KIAA0463 protein, partial cds
1832	14571	27284	0.96	1.0E-107	AB007922.2	NT	Homo sapiens mRNA for KIAA0463 protein, partial cds
2205	14933	27671	0.85	1.0E-107	U13729.1	NT	Human dipeptidyl peptidase IV (CD26) gene, exon 20
2362	15084	27822	1.45	1.0E-107	AW842451.1	EST_HUMAN	PM1-CN0031-190100-001-003 CN0031 Homo sapiens cDNA
2362	15084	27823	1.46	1.0E-107	AW842451.1	EST_HUMAN	PM1-CN0031-190100-001-003 CN0031 Homo sapiens cDNA
2535	15250	27891	1.2	1.0E-107	BE732460.1	EST_HUMAN	601567619F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3842309 5'
2535	15250	27892	1.2	1.0E-107	BE732460.1	EST_HUMAN	601567619F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3842309 5'
3007	15773	28421	3.89	1.0E-107	AW842451.1	EST_HUMAN	PM1-CN0031-190100-001-003 CN0031 Homo sapiens cDNA
3007	15773	28422	3.89	1.0E-107	AW842451.1	EST_HUMAN	PM1-CN0031-190100-001-003 CN0031 Homo sapiens cDNA
3096	15861	28502	2.63	1.0E-107	5902097	NT	Homo sapiens SMT3 (suppressor of mit two 3, yeast) homolog 2 (SMT3H2), mRNA
3806	16558	29190	5.14	1.0E-107	AF020971.1	NT	Homo sapiens myotubularin (MTM1) gene, exon 9
5637	18335	31242	0.66	1.0E-107	AW089038.1	EST_HUMAN	EST381115 MAGE resequences, MAGK Homo sapiens cDNA
5775	18596	31495	3.2	1.0E-107	BE867469.1	EST_HUMAN	601442558F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3846494 5'
6823	19484	32506	1.45	1.0E-107	11431469	NT	Homo sapiens general transcription factor IIIC, polypeptide 1 (alpha subunit, 220KD) (GTF3C1), mRNA
6823	19484	32507	1.45	1.0E-107	11431469	NT	Homo sapiens general transcription factor IIIC, polypeptide 1 (alpha subunit, 220KD) (GTF3C1), mRNA
7263	19947	33023	1.42	1.0E-107	AW503913.1	EST_HUMAN	UH-F-BN0-af-c-08-Q-U1-IT NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3079310 5'
7263	19947	33024	1.42	1.0E-107	AW503913.1	EST_HUMAN	UH-F-BN0-af-c-08-Q-U1-IT NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3079310 5'
7428	20106	33193	1.46	1.0E-107	A1765078.1	EST_HUMAN	wh56h04.x1 NCL_CGAP_Kd11 Homo sapiens cDNA clone IMAGE:2884791 3'
7660	20354	33469	0.6	1.0E-107	AW410981.1	EST_HUMAN	fh00d11.x2 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:2884524 5'
9287	22041	35213	0.95	1.0E-107	AU122469.1	EST_HUMAN	AU122469 MAMMA1 Homo sapiens cDNA clone MAMMA1002433 5'

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10003	23297	36537	3.18	1.0E-107	A392850.1	EST_HUMAN	ig10d061x1 NCL CGAP CLL1 Homo sapiens cDNA clone IMAGE:2108363 3' similar to SW:AAC1_DICDI
10886	23548	36794	14.28	1.0E-107	L49141.1	NT	P05095 ALPHA-ACTININ 3, NON MUSCULAR;
10880	23580	36807	1.71	1.0E-107	BF66511.1	EST_HUMAN	Homo sapiens neuroendocrine-specific protein (NSP) gene, exon 4
11283	23864	37252	0.00	1.0E-107	BE540350.1	EST_HUMAN	60212363F1 NIH_MGC_59 Homo sapiens cDNA clone IMAGE:4281039 5'
11857	23178	36405	5.97	1.0E-107	11419701	NT	601106051F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3452829 5'
11367	23178	36406	5.97	1.0E-107	11419701	NT	Homo sapiens HSPC049 protein (HSPC049), mRNA
11843	24427	37768	1.36	1.0E-107	4508970	NT	Homo sapiens HSPC049 protein (HSPC049), mRNA
11843	24427	37769	1.39	1.0E-107	4508970	NT	Homo sapiens solute carrier family 10 (sodium/bile acid cotransporter family), member 1 (SLC10A1) mRNA
12043	25328		5.88	1.0E-107	AA001416.1	EST_HUMAN	Homo sapiens solute carrier family 10 (sodium/bile acid cotransporter family), member 1 (SLC10A1) mRNA
935	13702	26387	2.66	1.0E-108	BE280042.1	EST_HUMAN	2645e01.s1 Soares retina N2b4HR Homo sapiens cDNA clone IMAGE:361944 3' similar to contains THR.b1
1242	13991	26357	1.87	1.0E-108	Y18000.1	NT	THR repetitive element;
						NT	601177018F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3532348 5'
						NT	Homo sapiens NF2 gene
2428	15149	27863	4.97	1.0E-106	BE200694.1	EST_HUMAN	bb25b10.x1 NIH_MGC_14 Homo sapiens cDNA clone IMAGE:2963899 3' similar to gb:X53777 60S
3344	16103	28755	0.71	1.0E-108	AF032897.1	NT	RIBOSOMAL PROTEIN L23 (HUMAN); gb:J05277 Mouse hexokinase mRNA, complete cds (MOUSE);
3344	16103	28756	0.71	1.0E-108	AF032897.1	NT	Homo sapiens potassium channel subunit (HERG-3) mRNA, complete cds
						NT	Homo sapiens potassium channel subunit (HERG-3) mRNA, complete cds
4136	16878	29507	1.14	1.0E-108	AW064438.1	EST_HUMAN	h12a11.x1 NCL CGAP_GU1 Homo sapiens cDNA clone IMAGE:2972060 3' similar to SW:3BP1_MOUSE
4489	17225	29853	2.18	1.0E-108	U72961.1	NT	P55194 SH3-BINDING PROTEIN 3BP-1;
4489	17225	29854	2.18	1.0E-108	U72961.1	NT	Human hepatocyte nuclear factor 4-alpha gene, exon 2
4752	17484	30113	1.74	1.0E-108	7861979	NT	Human hepatocyte nuclear factor 4-alpha gene, exon 2
4898	17823	30241	2.8	1.0E-108	AJ008006.1	NT	Homo sapiens KIAA0187 gene product (KIAA0187), mRNA
6391	18161	30883	1.16	1.0E-108	AW394094.1	EST_HUMAN	Homo sapiens PSN1 gene, alternative transcript
5440	18239	30954	1.7	1.0E-108	BE566016.1	EST_HUMAN	RCO-HT0372-241199-031-033 HT0372 Homo sapiens cDNA
5440	18239	30955	1.7	1.0E-108	BE566016.1	EST_HUMAN	60144462F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3848960 5'
5837	18626		0.99	1.0E-108	AF012623.1	NT	60144462F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3848960 5'
						NT	Homo sapiens familial mental retardation protein 2 (FMR2) gene, exon 20
6048	18828	31790	6.13	1.0E-108	AF284717.1	NT	Homo sapiens FYVE domain-containing dual specificity protein phosphatase FYVE-DSP2 mRNA, complete
6048	18828	31791	6.13	1.0E-108	AF284717.1	NT	cds
						NT	Homo sapiens FYVE domain-containing dual specificity protein phosphatase FYVE-DSP2 mRNA, complete

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6169	18946	31918	1.27	1.0E-108	AJ133289.1	NT	Homo sapiens caveolin-1/2 locus, Contig1, DYS522, genes CAV2 (exons 1, 2a, and 2b), CAV1 (exons 1 and 2)
6265	18997	31650	0.92	1.0E-108	BF334851.1	EST_HUMAN	PM4-CTD403-240700-001-c10 CT0403 Homo sapiens cDNA
6321	19287	32280	0.63	1.0E-108	AF018703.1	NT	Homo sapiens E6-AP ubiquitin-protein ligase (UBE3A) gene, exon 4
6521	19287	32281	0.63	1.0E-108	AF016706.1	NT	Homo sapiens E6-AP ubiquitin-protein ligase (UBE3A) gene, exon 4
7057	19748	32811	5.82	1.0E-108	11431857	NT	Homo sapiens G protein-coupled receptor, family C, group 5, member B (GPRC5B), mRNA
7339	20020	33098	3.55	1.0E-108	4788333	NT	Homo sapiens delta-6 fatty acid desaturase (FADS6) mRNA
7377	20057	33137	1.16	1.0E-108	BE262607.1	EST_HUMAN	601113471F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3954084 5'
7406	20082	33194	0.84	1.0E-108	BF528912.1	EST_HUMAN	602043394F1 NCI_CGAP_Brm67 Homo sapiens cDNA clone IMAGE:4181037 5'
7406	20082	33165	0.84	1.0E-108	BF528912.1	EST_HUMAN	602043394F1 NCI_CGAP_Brm67 Homo sapiens cDNA clone IMAGE:4181037 5'
7963	20658	33838	1.68	1.0E-108	AF083500.1	NT	Homo sapiens connective tissue growth factor-like protein precursor, mRNA, complete cds
8014	20709	33839	0.48	1.0E-108	AW408694.1	EST_HUMAN	U1-HF-BMD-ads-e-12-0-UL1 NIH_MGC_38 Homo sapiens cDNA clone IMAGE:3062878 5'
8014	20709	33839	0.48	1.0E-108	AW408694.1	EST_HUMAN	U1-HF-BMD-ads-e-12-0-UL1 NIH_MGC_38 Homo sapiens cDNA clone IMAGE:3062878 5'
8945	21636	34781	0.75	1.0E-108	AF203977.1	NT	Homo sapiens ETS-family transcription factor EHF (EHF) mRNA, complete cds
8984	21674	34823	0.54	1.0E-108	N44974.1	EST_HUMAN	y35h10.11 Soares melanocyte 2Nbl-IM Homo sapiens cDNA clone IMAGE:273283 5' similar to PIR-A45773
10565	20368	33481	1.73	1.0E-108	BE535227.1	EST_HUMAN	A45773 kelch protein, long form - fruit fly
10731	17911	30597	1.98	1.0E-108	Y12490.1	NT	601058769F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3446361 5'
10998	23671	36628	1.39	1.0E-108	AF223391.1	NT	Homo sapiens mRNA for Golgi-associated microtubule-binding protein (GNAP-210)
11239	23902	37191	3.82	1.0E-108	AW966185.1	EST_HUMAN	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
11294	23955	37253	2.2	1.0E-108	AV708790.1	EST_HUMAN	EST378258 IMAGE resequences, MAGI Homo sapiens cDNA
11294	23955	37254	2.2	1.0E-108	AV708790.1	EST_HUMAN	AV708790 ADC Homo sapiens cDNA clone ADCAEE03 5'
11343	24033		1.87	1.0E-108	11441465	NT	AV708790 ADC Homo sapiens cDNA clone ADCAEE03 5'
11405	24054	37359	1.68	1.0E-108	D63630.1	NT	Homo sapiens G protein-coupled receptor 48 (GPR48), mRNA
12204	24671	31072	2.41	1.0E-108	AK024447.1	NT	Homo sapiens COL4A8 gene for alpha(V) collagen, exon 23
12583	24906		8.32	1.0E-108	BF346356.1	EST_HUMAN	Homo sapiens mRNA for FLJ00037 protein, partial cds
41	12869	25468	0.87	1.0E-108	AW803116.1	EST_HUMAN	602018571F1 NCI_CGAP_Brm67 Homo sapiens cDNA clone IMAGE:4154297 5'
62	12890	25523	0.97	1.0E-108	D86974.1	NT	IL2-UM0077-280400-079-D08 UM0077 Homo sapiens cDNA
220	13031	25667	1.59	1.0E-109	11436391	NT	Human mRNA for KIAA0220 gene, partial cds
454	13240	25678	5.69	1.0E-109	4507712	NT	Homo sapiens reticulocalbin 1, EF-hand calcium binding domain (RCN1), mRNA
584	13364	25682	26.8	1.0E-109	AB023216.1	NT	Homo sapiens tetrahydrofolate repeat domain 2 (TTC2) mRNA
584	13364	25682	26.8	1.0E-109	AB023216.1	NT	Homo sapiens KIAA0989 protein, partial cds
584	13364	25682	26.8	1.0E-109	AB023216.1	NT	Homo sapiens KIAA0989 protein, partial cds
1180	13933	26598	10.97	1.0E-109	M28698.1	NT	Homo sapiens nuclear phosphoprotein B23 (NPM1) mRNA, complete cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1181	13033	26598	4	1.0E-109	M28699.1	NT	Homo sapiens nuclear phosphoprotein B23 (NPM1) mRNA, complete cds
1533	14280	26967	3.31	1.0E-109	BE263673.1	EST_HUMAN	601186922F2 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:29569336 5'
1533	14280	26968	3.31	1.0E-109	BE263673.1	EST_HUMAN	601186922F2 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:29569336 5'
1887	14605	27315	3.3	1.0E-109	D13643.2	NT	Homo sapiens mRNA for KIAA0018 protein, partial cds
2237	14605	27705	1.78	1.0E-109	AL163264.2	NT	Homo sapiens chromosome 21 segment HS21C084
2248	14978	27714	1.89	1.0E-109	Y17123.1	NT	Homo sapiens SNF5/INI1 gene, exon 6
2628	15340	28084	3.98	1.0E-109	A022328.1	EST_HUMAN	ow65a01.x1 Sources_fetal_liver_infls_S1 Homo sapiens cDNA clone IMAGE:1654536 3' similar to TR:002197 002197 CIRCULATING CATHODIC ANTIGEN.;
2628	15340	28085	3.98	1.0E-109	A022328.1	EST_HUMAN	ow65a01.x1 Sources_fetal_liver_infls_S1 Homo sapiens cDNA clone IMAGE:1654536 3' similar to TR:002197 002197 CIRCULATING CATHODIC ANTIGEN.;
2629	16341	28086	2.07	1.0E-109	4504206	NT	Homo sapiens guanylate cyclase activator 1A (retina) (GUCA1A) mRNA
3054	16820	28464	2.22	1.0E-109	N85190.1	EST_HUMAN	J2816F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA clone J2816 5' similar to ZINC FINGER PROTEIN ZNF43
3383	16142	28799	3.14	1.0E-109	AW893192.1	EST_HUMAN	CM3-NIN0009-190400-150-110 NIN0009 Homo sapiens cDNA
3383	16142	28800	3.14	1.0E-109	AW893192.1	EST_HUMAN	CM3-NIN0009-190400-150-110 NIN0009 Homo sapiens cDNA
3608	16264	28918	1.21	1.0E-109	AF240698.1	NT	Homo sapiens retinol dehydrogenase homolog isoform-1 (RDH) mRNA, complete cds
3648	16303	28953	0.9	1.0E-109	M37928.1	NT	Homo sapiens adenosine triphosphatase deaminase 1 (AMPD1) gene, exons 8-10
3548	16303	28954	0.9	1.0E-109	M37928.1	NT	Homo sapiens adenosine triphosphatase deaminase 1 (AMPD1) gene, exons 8-10
3823	16575	29357	2.59	1.0E-109	BE148144.1	EST_HUMAN	MPO-HIT0209-110400-108-s04 HIT0209 Homo sapiens cDNA
3974	16723	29357	1.42	1.0E-109	AB011181.2	NT	Homo sapiens mRNA for KIAA0609 protein, partial cds
3974	16723	29358	1.42	1.0E-109	AB011181.2	NT	Homo sapiens mRNA for KIAA0609 protein, partial cds
4127	16869	29497	3.88	1.0E-109	A1665417.1	EST_HUMAN	ts98a06.x1 NCL_CGAP_GC8 Homo sapiens cDNA clone IMAGE:22393330 3' similar to WP-F53A2.8 CE16100;
4141	16883	29512	1.02	1.0E-109	AA062274.1	EST_HUMAN	nu63c12.s1 NCL_CGAP_P122 Homo sapiens cDNA clone IMAGE:1218262 3' similar to SW:GTT2_HUMAN
4141	16883	29513	1.02	1.0E-109	AA062274.1	EST_HUMAN	nu63c12.s1 NCL_CGAP_P122 Homo sapiens cDNA clone IMAGE:1218262 3' similar to SW:GTT2_HUMAN
4371	17109	29744	2.48	1.0E-109	4504206	NT	PS0712 GLUTATHIONE S-TRANSFERASE THETA 2;
4561	17298	29923	1.69	1.0E-109	7662083	NT	PS0712 GLUTATHIONE S-TRANSFERASE THETA 2;
4867	17595	30218	1.27	1.0E-109	R15400.1	EST_HUMAN	Homo sapiens guanylate cyclase activator 1A (retina) (GUCA1A) mRNA
4862	17715	30320	1.39	1.0E-109	BE263673.1	EST_HUMAN	Homo sapiens KIAA0377 gene product (KIAA0377), mRNA
4862	17715	30321	1.39	1.0E-109	BE263673.1	EST_HUMAN	ye48a06.r1 Sources_infant_brain_1NIB Homo sapiens cDNA clone IMAGE:53057 5'
5167	17978	30534	0.81	1.0E-109	AU137282.1	EST_HUMAN	601186922F2 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:29569336 5'
5179	17988	30503	1.08	1.0E-109	BF673718.1	EST_HUMAN	601186922F2 NIH_MGC_15 Homo sapiens cDNA clone PLACE1006159 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5230	18038	30692	3.09	1.0E-109	5174622	NT	Homo sapiens placental protein 11 (serine proteinase) (P11) mRNA
5520	18318		1.11	1.0E-109	BE179356.1	EST_HUMAN	RC1-HT0615-200400-022-004 HT0615 Homo sapiens cDNA
5838	25078	31590	0.64	1.0E-109	BF379888.1	EST_HUMAN	CM1-UT0038-060900-390-007 UT0038 Homo sapiens cDNA
5907	18318		1.6	1.0E-109	BE179356.1	EST_HUMAN	RC1-HT0616-200400-022-004 HT0616 Homo sapiens cDNA
7140	19827	32696	0.97	1.0E-109	AB046811.1	NT	Homo sapiens mRNA for KIAA1891 protein, partial cds
7464	20138	33230	3.99	1.0E-109	11432574	NT	Homo sapiens AT-binding transcription factor 1 (ATBF1), mRNA
7466	20140	33232	5.28	1.0E-109	BF182707.1	EST_HUMAN	601809405F1 NIH_MGC_18 Homo sapiens cDNA clone IMAGE:4040279 5'
7468	20140	33233	5.28	1.0E-109	BF182707.1	EST_HUMAN	601809405F1 NIH_MGC_18 Homo sapiens cDNA clone IMAGE:4040279 5'
7674	20338	33451	0.67	1.0E-109	BE263267.1	EST_HUMAN	601145017F2 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3160229 5'
8073	20767	33896	1.48	1.0E-109	AL049784.1	NT	Novel human gene mapping to chromosome 13
8163	20877	34014	0.99	1.0E-109	AW749130.1	EST_HUMAN	PMD-BT0340-081298-002-005 BT0340 Homo sapiens cDNA
8555	21247		2.77	1.0E-109	AA077498.1	EST_HUMAN	7B18H01 Chromosome 7 Fetal Brain cDNA Library Homo sapiens cDNA clone 7B18H01
8633	21325	34488	8.42	1.0E-109	BE787540.1	EST_HUMAN	601478417F1 NIH_MGC_88 Homo sapiens cDNA clone IMAGE:3882124 5'
8633	21325	34487	8.42	1.0E-109	BE787540.1	EST_HUMAN	601478417F1 NIH_MGC_88 Homo sapiens cDNA clone IMAGE:3882124 5'
8876	21567	34711	0.56	1.0E-109	BE145672.1	EST_HUMAN	IL0-HT0205-071190-142-001 HT0205 Homo sapiens cDNA
9137	21825	34990	1.91	1.0E-109	H84890.1	EST_HUMAN	ys00p08.r1 Soares retina N25bHR Homo sapiens cDNA clone IMAGE:222110 5' similar to SP-A53491
9250	21929	35101	0.63	1.0E-109	BE397068.1	EST_HUMAN	A53491 BUMETANIDE-SENSITIVE NA-K-Cl COTRANSPORTER - SPINY;
9250	21929	35102	0.63	1.0E-109	BE397068.1	EST_HUMAN	601289760F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3620030 5'
9384	22046	35218	2.64	1.0E-109	F06604.1	EST_HUMAN	601289760F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3620030 5'
10673	23364	36606	1.71	1.0E-109	BE540309.1	EST_HUMAN	HSC1EC121 normalized infant brain cDNA Homo sapiens cDNA clone c-1ect12
10673	23364	36607	1.71	1.0E-109	BE540309.1	EST_HUMAN	601063030F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3449569 5'
10710	23399	36638	15.79	1.0E-109	BF694831.1	EST_HUMAN	601063030F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3449569 5'
10888	23568	36618	1.55	1.0E-109		NT	602080724F2 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4245341 5'
10888	23568	36619	1.55	1.0E-109		NT	Homo sapiens KIAA0744 gene product; histone deacetylase 7 (KIAA0744), mRNA
11069	23739	37013	1.8	1.0E-109	AU121370.1	EST_HUMAN	Homo sapiens KIAA0744 gene product; histone deacetylase 7 (KIAA0744), mRNA
11342	24032	37336	2.72	1.0E-109	4502838	NT	AU121370 HEMBB1 Homo sapiens cDNA clone HEMBB1002860 5'
11383	23990	37291	11.6	1.0E-109	W10510.1	EST_HUMAN	Homo sapiens Chediak-Higashi syndrome 1 (CHS1) mRNA
11855	24280	37602	1.46	1.0E-109	11418618	NT	z08b12.r1 Soares_fetal_lung_NbHL10W Homo sapiens cDNA clone IMAGE:301439 5' similar to
11848	24432	37773	1.27	1.0E-109	BF339540.1	EST_HUMAN	PIR-S43969 S43969 p64-beta stress-activated protein kinases - rat;
11848	24432	37774	1.27	1.0E-109	BF339540.1	EST_HUMAN	Homo sapiens single-minded (Drosophila) homolog 1 (SIM1), mRNA
12112	14976	27714	2.1	1.0E-109	Y17123.1	NT	602036003F1 NCI_OGAP_Bm84 Homo sapiens cDNA clone IMAGE:4186753 5'
12328	14976	27714	2.73	1.0E-109	Y17123.1	NT	602036003F1 NCI_OGAP_Bm84 Homo sapiens cDNA clone IMAGE:4186753 5'



Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12443	24813	31047	2.08	1.0E-109	AB011399.1	NT	Homo sapiens gene for AF-6, complete cds
3	12831	25444	1.65	1.0E-110	7549804	NT	Homo sapiens deiodinase, iodothyronine, type II (DIO2), transcript variant 2, mRNA
36	12884	25482	4.71	1.0E-110	5803073	NT	Homo sapiens leucine-zipper-like transcriptional regulator, 1 (LZTR1), mRNA
36	12884	25483	4.71	1.0E-110	5803073	NT	Homo sapiens leucine-zipper-like transcriptional regulator, 1 (LZTR1), mRNA
79	12905	25543	0.7	1.0E-110	C04498.1	EST_HUMAN	C04498 Human heart cDNA (YNAKumura) Homo sapiens cDNA clone 3NHIC3467
107	12831	25444	2.26	1.0E-110	7549804	NT	Homo sapiens deiodinase, iodothyronine, type II (DIO2), transcript variant 2, mRNA
514	13298	25030	1.54	1.0E-110	U84550.1	NT	Human dyetobrevin (DTN) gene, exon 20
1157	13912	26575	0.8	1.0E-110	5031620	NT	Homo sapiens calcitonin receptor-like (CALCRL) mRNA
1258	14006	26674	0.8	1.0E-110	AB032263.1	NT	Homo sapiens BAZ1B mRNA for bromodomain adjacent to zinc finger domain 1B, complete cds
1914	14651	27361	1.19	1.0E-110	BE379477.1	EST_HUMAN	801237545F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3609883 5'
2051	14784		1.6	1.0E-110	BF508896.1	EST_HUMAN	UHLB14-acc-b-05-0-UI.s1 NCI_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3085784 3'
2845	15613		1	1.0E-110	4503098	NT	Homo sapiens chondroitin sulfate proteoglycan 4 (melanoma-associated) (CSPG4), mRNA
3189	15952	28603	1.49	1.0E-110	11436041	NT	Homo sapiens pregnancy-zone protein (PZP), mRNA
3189	15952	28604	1.49	1.0E-110	11436041	NT	Homo sapiens pregnancy-zone protein (PZP), mRNA
4031	16776	29407	1.09	1.0E-110	BE018556.1	EST_HUMAN	b682a05.y1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3048848 5' similar to TR:060312 O60312 KIAA0506 PROTEIN:
4891	17328	28951	2.14	1.0E-110	AD017213.1	EST_HUMAN	cu32b10.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1627983 3' similar to SW:NI21_RAT_P52591 NUCLEAR ENVELOPE PORE MEMBRANE PROTEIN POM 121;
4891	17341	28972	3.9	1.0E-110	AU117812.1	EST_HUMAN	AU117812 HEMBA1 Homo sapiens cDNA clone HEMBA1002241 5'
4891	17844		2.7	1.0E-110	7962441	NT	Homo sapiens KIAA1002 protein (KIAA1002), mRNA
5212	18020	30642	2.63	1.0E-110	BE296406.1	EST_HUMAN	601118710F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3028538 5'
5639	18434	31347	0.8	1.0E-110	BE521069.1	EST_HUMAN	601493977F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3885795 5'
5656	18451	31364	8.61	1.0E-110	11419323	NT	Homo sapiens hypothetical protein FLJ10300 (FLJ10300), mRNA
5656	18451	31365	8.61	1.0E-110	11419323	NT	Homo sapiens hypothetical protein FLJ10300 (FLJ10300), mRNA
6617	25008	32395	8.08	1.0E-110	M55112.1	NT	Homo sapiens cytochrome b5 transmembrane conductance regulator (CfTR) gene, exon 7
7002	19694	32746	0.8	1.0E-110	U08886.1	NT	Human GS2 gene, exon 2
7002	19694	32747	0.8	1.0E-110	U08886.1	NT	Human GS2 gene, exon 2
7224	19909	32963	0.74	1.0E-110	AI600286.1	EST_HUMAN	tnt12008.x1 NCI_CGAP_Bn25 Homo sapiens cDNA clone IMAGE:2167407 3' similar to SW:ETV1_HUMAN
7325	20008	33085	6.9	1.0E-110	AV714276.1	EST_HUMAN	P50549 ETS TRANSLOCATION VARIANT 1;
7325	20008	33086	6.9	1.0E-110	AV714276.1	EST_HUMAN	AV714276 DC8 Homo sapiens cDNA clone DC8CGE01 5'
7355	20036	33114	3.21	1.0E-110	AB020675.1	NT	AV714278 DC8 Homo sapiens cDNA clone DC8CGE01 5'
7489	20143	33235	0.83	1.0E-110	AU137623.1	EST_HUMAN	Homo sapiens mRNA for KIAA0868 protein, partial cds
							AU137623 PLACE1 Homo sapiens cDNA clone PLACE1007511 5'

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9234	21613	35087	7.88	1.0E-110	BE302594.1	EST_HUMAN	bca8801.y1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:2605561 5' similar to TR:O77258 O77258 EG:114D8.2 PROTEIN.;
9276	22129	35308	2.39	1.0E-110	AW836394.1	EST_HUMAN	QVZ-LT0053-020400-119-e04 LT0063 Homo sapiens cDNA
10221	22869	36081	3.46	1.0E-110	11432732	NT	Homo sapiens galactokinase 2 (GALK2), mRNA
10848	23339	36578	3.64	1.0E-110	Y1237.1	NT	H. sapiens mRNA for myotonic dystrophy protein kinase like protein
10857	23567	36816	3.75	1.0E-110	BE734357.1	EST_HUMAN	B01566504F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3840433 5'
10887	23567	36817	3.75	1.0E-110	BE734357.1	EST_HUMAN	B01566504F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3840433 5'
11420	23187	36418	2.45	1.0E-110	AA446529.1	EST_HUMAN	zw67g02.r1 Soares_testes_NHT Homo sapiens cDNA clone IMAGE:781298 5' similar to TR:G1145816 G1145816 FKBP4;
11939	24498		4.54	1.0E-110	BE597218.1	EST_HUMAN	B01439784F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3924548 5'
12061	24578		11.71	1.0E-110	AW062258.1	EST_HUMAN	ILO-BT0163-040899-094-gt10 BT0163 Homo sapiens cDNA
12290	24720		1.44	1.0E-110	AB011389.1	NT	Homo sapiens gene for AF-8, complete cds
12346	24763		1.35	1.0E-110	A1127761.1	EST_HUMAN	q3c1c12.x1 Soares_pregnant_uterus_NHHPU Homo sapiens cDNA clone IMAGE:1711222 3'
12429	25339		3.25	1.0E-110	BF364546.1	EST_HUMAN	PW3-NN1082-140300-006-f12 NN1082 Homo sapiens cDNA
12701	14784		1.45	1.0E-110	BF508608.1	EST_HUMAN	UI-H-BI4-acc-b-05-o-UJ.e1 NCJ_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3085784 3'
170	12963		10.84	1.0E-111	U43701.1	NT	Human ribosomal protein L23a mRNA, complete cds
191	13004	25645	1.05	1.0E-111	4789807	NT	Homo sapiens ras GTPase activating protein-like (NGAP) mRNA
718	13492	26154	2.38	1.0E-111	BF036327.1	EST_HUMAN	B01458631F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3862088 5'
726	13500	26154	5.13	1.0E-111	M25142.1	NT	Homo sapiens cat eye syndrome critical region gene 1 (CECR1), mRNA
906	13673	26338	3.82	1.0E-111	M25142.1	NT	Homo sapiens cardiac alpha-myosin heavy chain (MYH6) gene, exons 32 to 34
1824	14371	27080	1.43	1.0E-111	7692177	NT	Human cardiac alpha-myosin heavy chain (MYH6) gene product (KIAA0555), mRNA
2234	14982	27701	1.02	1.0E-111	AF036128.1	NT	Homo sapiens KIAA0555 gene product (KIAA0555), mRNA
4150	16892	29522	1.08	1.0E-111	K02268.1	NT	Homo sapiens collagen type IX alpha 1 chain (COL9A1) gene, exons 29, 30, 31, and 32
4295	17034	29682	4.38	1.0E-111	K02268.1	NT	Homo sapiens DKFPZP434D158 protein [DKFPZP434D158], mRNA
4991	17425	30067	8.38	1.0E-111	4505778	NT	Human encephalin B (enkeB) gene, exon 4 and 3' flank and complete cds
5544	18341	31249	1.09	1.0E-111	BE607908.1	EST_HUMAN	Homo sapiens phosphotyrosine kinase, alpha 1 (muscle) (PHKA1), mRNA
5942	18724	31883	1.98	1.0E-111	A1344676.1	EST_HUMAN	Homo sapiens phosphotyrosine kinase, alpha 1 (muscle) (PHKA1), mRNA
6580	19343	32357	1.16	1.0E-111	AL040782.1	EST_HUMAN	Homo sapiens phosphotyrosine kinase, alpha 1 (muscle) (PHKA1), mRNA
6709	19624	32958	1.06	1.0E-111	AW294648.1	EST_HUMAN	Homo sapiens phosphotyrosine kinase, alpha 1 (muscle) (PHKA1), mRNA
7347	20028	33104	2.99	1.0E-111	BF366228.1	EST_HUMAN	Homo sapiens phosphotyrosine kinase, alpha 1 (muscle) (PHKA1), mRNA
7433	20110	33198	0.62	1.0E-111	A1781228.1	EST_HUMAN	RELATED CGAP_RAL-A (HUMAN); RELATD01.x1 NCJ_CGAP_Kd12 Homo sapiens cDNA clone IMAGE:2398465 3' similar to gb:M29663 RAS-q08gt12.x1 NCJ_CGAP_RAL-A (HUMAN); RELATED CGAP_RAL-A (HUMAN); DFZFp434C1815_r1_434 (synonym: hnc3) Homo sapiens cDNA clone DFZFp434C1815 5' UI-H-BW0-wf-d-03-o-UJ.e1 NCJ_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:2728525 3' IL2-NT0101-280700-114-E03 NT0101 Homo sapiens cDNA wf8cd01.x1 NCJ_CGAP_Kd12 Homo sapiens cDNA clone IMAGE:2398465 3' similar to gb:M29663 RAS-CYTTOCHROME P450 IIA5 (HUMAN);

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Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7614	20185	33279	0.6	1.0E-111	U80017.1	NT	Homo sapiens basic transcription factor 2 p44 (btf2p44) gene, partial cds, neuronal apoptosis inhibitory protein (nrip) and survival motor neuron protein (smn) genes, complete cds
7693	20688	33815	0.73	1.0E-111	AA278868.1	EST_HUMAN	z79g03.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:703732 5' similar to TR:G1256410
7993	20688	33816	0.73	1.0E-111	AA278868.1	EST_HUMAN	G1256410 11-ZINC-FINGER TRANSCRIPTION FACTOR ;
8088	20782	33912	0.62	1.0E-111	11431898	NT	z79g03.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:703732 5' similar to TR:G1256410
8139	20833	33987	3.28	1.0E-111	U66533.1	NT	G1256410 11-ZINC-FINGER TRANSCRIPTION FACTOR ;
8579	21271	34409	0.79	1.0E-111	11420516	NT	z79g03.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:703732 5' similar to TR:G1256410
8674	21368	34513	0.73	1.0E-111	AK024483.1	NT	G1256410 11-ZINC-FINGER TRANSCRIPTION FACTOR ;
8707	21369		1.57	1.0E-111	AF177087.1	NT	Homo sapiens protein x 0001 (LOC61185), mRNA
8708	21400		8.65	1.0E-111	BF214802.1	EST_HUMAN	Homo sapiens protein x 0001 (LOC61185), mRNA
8782	21474	34620	12.9	1.0E-111	X17033.1	NT	Human beta4-integrin (ITGB4) gene, exon 13
8782	21474	34621	12.9	1.0E-111	X17033.1	NT	Human beta4-integrin (ITGB4) gene, exon 13
8886	21876	34825	2.8	1.0E-111	AF091395.1	NT	Homo sapiens nuclear factor of activated T-cells, cytoplasmic 2 (NFATC2), mRNA
9217	21898	35066	0.49	1.0E-111	BF333210.1	EST_HUMAN	Homo sapiens mRNA for FLJ00046 protein, partial cds
10062	22700	35917	3.21	1.0E-111	AA604180.1	EST_HUMAN	Homo sapiens cone sodium-calcium potassium exchanger splice variant (NCKX) mRNA, complete cds
10080	22728		2.4	1.0E-111	D10083.1	NT	601847132F1 NH_MGC_66 Homo sapiens cDNA clone IMAGE:4078303 5'
10172	22820	39038	5.24	1.0E-111	AA131248.1	EST_HUMAN	Human mRNA for Integrin alpha-2 subunit
10673	23849	36902	4.25	1.0E-111	U68186.1	NT	Human mRNA for Integrin alpha-2 subunit
11465	24098	37376	2.74	1.0E-111	A1761071.1	EST_HUMAN	Homo sapiens Trio isoform mRNA, complete cds
11897	24464	37802	3.72	1.0E-111	11417901	NT	Homo sapiens QY2-BT0817-270600-398-406 BT0817 Homo sapiens cDNA
12424	24800	31040	1.51	1.0E-111	AV708482.1	EST_HUMAN	QY2-BT0817-270600-398-406 BT0817 Homo sapiens cDNA
12672	17914	30599	1.56	1.0E-111	AB035356.1	NT	QY2-BT0817-270600-398-406 BT0817 Homo sapiens cDNA
594	13372	26001	1.28	1.0E-112	4501854	NT	QY2-BT0817-270600-398-406 BT0817 Homo sapiens cDNA
596	13374	26003	12.55	1.0E-112	U29103.1	NT	QY2-BT0817-270600-398-406 BT0817 Homo sapiens cDNA
596	13374	26004	12.55	1.0E-112	U29103.1	NT	QY2-BT0817-270600-398-406 BT0817 Homo sapiens cDNA
617	13395	26029	1.86	1.0E-112	BF509039.1	EST_HUMAN	QY2-BT0817-270600-398-406 BT0817 Homo sapiens cDNA
617	13395	26030	1.86	1.0E-112	BF509039.1	EST_HUMAN	QY2-BT0817-270600-398-406 BT0817 Homo sapiens cDNA
961	13746	26408	8.84	1.0E-112	AF157623.1	NT	QY2-BT0817-270600-398-406 BT0817 Homo sapiens cDNA
1040	13800	26456	2.2	1.0E-112	P52742	SWISSPROT	QY2-BT0817-270600-398-406 BT0817 Homo sapiens cDNA

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1679	14423	27117	4.39	1.0E-112	7682125	NT	Homo sapiens KIAA0440 protein (KIAA0440), mRNA
1679	14423	27118	4.39	1.0E-112	7682125	NT	Homo sapiens KIAA0440 protein (KIAA0440), mRNA
2194	14923	27657	1.37	1.0E-112	AJ769925.1	EST_HUMAN	wf90f06.x1 NCI_CGAP_K412 Homo sapiens cDNA clone IMAGE:2400811 3'
2512	15229	27666	1.1	1.0E-112	BE868858.1	EST_HUMAN	601442874F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3846858 5'
3076	15842		1.15	1.0E-112	4504116	NT	Homo sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1) mRNA
3355	16116	28770	0.7	1.0E-112	AB28611.1	EST_HUMAN	wk45b12.x1 NCI_CGAP_P122 Homo sapiens cDNA clone IMAGE:2418335 3' similar to gb:M81650_mai
3804	16614	28253	0.74	1.0E-112	BE076073.1	EST_HUMAN	SEMN0GELIN 1 PROTEIN PRECURSOR (HUMAN);
4565	17300	29627	1.39	1.0E-112	4504116	NT	MR2-BT0580-060300-113-109 BT0580 Homo sapiens cDNA
4704	17437	30068	4.9	1.0E-112	AB037832.1	NT	Homo sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1) mRNA
4704	17437	30069	4.9	1.0E-112	AB037832.1	NT	Homo sapiens mRNA for KIAA1411 protein, partial cds
5581	18378	31291	40.71	1.0E-112	N46048.1	EST_HUMAN	Homo sapiens mRNA for KIAA1411 protein, partial cds
5585	18786	31730	1.04	1.0E-112	AF148773.1	NT	yy35d07.r1 Soares melanocyte 2NHRM Homo sapiens cDNA clone IMAGE:273228 5'
6155	18932	31809	1.43	1.0E-112	BE741066.1	EST_HUMAN	Homo sapiens NOD1 protein (NOD1) gene, exons 1, 2, and 3
6369	19136	32134	0.68	1.0E-112	BF672815.1	EST_HUMAN	60159471F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3946557 5'
6539	19304	32308	0.71	1.0E-112	BE273103.1	EST_HUMAN	602152849F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4293420 5'
6539	19304	32309	0.71	1.0E-112	BE273103.1	EST_HUMAN	601142755F1 NIH_MGC_14 Homo sapiens cDNA clone IMAGE:3508508 5'
6741	19575	32607	1.13	1.0E-112	BF574235.1	EST_HUMAN	601142755F1 NIH_MGC_14 Homo sapiens cDNA clone IMAGE:3508508 5'
7236	19921	32995	1.87	1.0E-112	11418777	NT	602131405F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4270921 5'
7236	19921	32996	1.87	1.0E-112	11418777	NT	Homo sapiens solute carrier family 6 (neurotransmitter transporter, L-proline), member 7 (SLC6A7), mRNA
7729	25120	33507	0.56	1.0E-112	BF213358.1	EST_HUMAN	Homo sapiens solute carrier family 6 (neurotransmitter transporter, L-proline), member 7 (SLC6A7), mRNA
8093	20787	33919	1.73	1.0E-112	AU118051.1	EST_HUMAN	601845089F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:4070302 5'
8958	21547	34964	2.09	1.0E-112	BE867635.1	EST_HUMAN	AU118051 HEMBA1 Homo sapiens cDNA clone HEMBA1002773 5'
8958	21547	34965	2.09	1.0E-112	BE867635.1	EST_HUMAN	601443151F1 NIH_MGC_95 Homo sapiens cDNA clone IMAGE:3847285 5'
9783	22444	35949	2.15	1.0E-112	BF111413.1	EST_HUMAN	601443151F1 NIH_MGC_95 Homo sapiens cDNA clone IMAGE:3847285 5'
10677	23388	36911	2.86	1.0E-112	AW863327.1	EST_HUMAN	730g07.x1 Soares NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3523020 3' similar to
10688	23548	36796	3.37	1.0E-112	AJ246900.1	NT	TR:Q9VW35 Q9VW35 CG8743 PROTEIN ;
11040	23711	36981	1.82	1.0E-112	BE280479.1	EST_HUMAN	MR3-SN0008-100400-108-b12 SN0009 Homo sapiens cDNA
11109	23779	37053	1.59	1.0E-112	AJ792603.1	EST_HUMAN	Homo sapiens mRNA for secreted modular calcium-binding protein (smoc1 gene)
							601155323F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3138989 5'
							qlk2c08.y6 NCI_CGAP_K438 Homo sapiens cDNA clone IMAGE:1869902 5' similar to TR:Q64362 Q64362
							FUSED TOES ;

Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11109	23779	37054	1.89	1.0E-112	A1792603.1	EST_HUMAN	qk24c08.y5 NC1_CGAP_Kd3 Homo sapiens cDNA clone IMAGE:186902 5' similar to TR:Q64362 Q64362 FUSED TOES;
11139	23808	37085	6.6	1.0E-112	AW377870.1	EST_HUMAN	PMO-CT0237-141099-001-102 CT0237 Homo sapiens cDNA
11810	24399	37734	1.92	1.0E-112	A1792603.1	EST_HUMAN	qk24c08.y5 NC1_CGAP_Kd3 Homo sapiens cDNA clone IMAGE:186902 5' similar to TR:Q64362 Q64362 FUSED TOES;
11810	24399	37735	1.92	1.0E-112	A1792603.1	EST_HUMAN	qk24c08.y5 NC1_CGAP_Kd3 Homo sapiens cDNA clone IMAGE:186902 5' similar to TR:Q64362 Q64362 FUSED TOES;
725	13499	26152	5.37	1.0E-113	A1365586.1	EST_HUMAN	ac95f01.x1 Schiller meningioma Homo sapiens cDNA clone IMAGE:1953825 3'
725	13499	26153	5.37	1.0E-113	A1365586.1	EST_HUMAN	ac95f01.x1 Schiller meningioma Homo sapiens cDNA clone IMAGE:1953825 3'
921	13688	28362	7.99	1.0E-113	M11985.1	NT	Human X-linked phosphoglycerate kinase gene, exon 8
1532	14279	26906	2.86	1.0E-113	A1365586.1	EST_HUMAN	ac95f01.x1 Schiller meningioma Homo sapiens cDNA clone IMAGE:1953825 3'
1932	15524	27382	1.44	1.0E-113	AF240775.1	NT	Homo sapiens eIF4E-transporter mRNA, complete cds
2088	14820	27581	1.02	1.0E-113	BF616218.1	EST_HUMAN	UH-BW1-ant-f03-Q-UJ.s1 NC1_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3082878 3'
2456	15174	27813	26.34	1.0E-113	A10006978.1	NT	Homo sapiens PLP gene
3127	19882	28536	1.92	1.0E-113	A1223948.1	NT	Homo sapiens mRNA for putative RNA helicase, 3' end
4966	17691	30300	0.91	1.0E-113	D85608.1	NT	Homo sapiens gene for cholesteryl type-A receptor, complete cds
5008	17731	30335	2.16	1.0E-113	5453562	NT	Homo sapiens activating transcription factor B (B-ATF), mRNA
5008	17731	30336	2.16	1.0E-113	5453562	NT	Homo sapiens activating transcription factor B (B-ATF), mRNA
5165	25178		2.97	1.0E-113	BE780888.1	EST_HUMAN	601489495F1 NIH_MGC_87 Homo sapiens cDNA clone IMAGE:3872538 5'
5405	18205	30909	7.86	1.0E-113	AU127214.1	EST_HUMAN	AU127214 NT2RP2 Homo sapiens cDNA clone NT2RP2000807 5'
5832	18621	31554	4.17	1.0E-113	AU140291.1	EST_HUMAN	AU140291 PLAGE2 Homo sapiens cDNA clone PLAGE2000274 5'
5861	18648	31589	1.47	1.0E-113	AF016635.1	NT	Homo sapiens P-glycoprotein (mdr1) mRNA, complete cds
5979	18761	31725	2.82	1.0E-113	11825737	NT	Homo sapiens UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylglucosaminyltransferase 8 (GALNAC-T8) (GALNT8), mRNA
6084	18843	31806	0.88	1.0E-113	9081249	NT	Homo sapiens ATP-binding cassette, sub-family B (MDR/TAP), member 4 (ABCB4), transcript variant B, mRNA
6084	18843	31807	0.88	1.0E-113	9081249	NT	Homo sapiens ATP-binding cassette, sub-family B (MDR/TAP), member 4 (ABCB4), transcript variant B, mRNA
6224	18908	31074	0.8	1.0E-113	6006002	NT	Homo sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 2A (GRIN2A) mRNA
6224	18908	31975	0.8	1.0E-113	6006002	NT	Homo sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 2A (GRIN2A) mRNA
7221	19806	32979	0.78	1.0E-113	BE262161.1	EST_HUMAN	601152078F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3508362 5'
7221	19806	32980	0.78	1.0E-113	BE262161.1	EST_HUMAN	601152078F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3508362 5'
7573	20242	33347	0.56	1.0E-113	AW958960.1	EST_HUMAN	EST371030 IMAGE ressequences, IMAGE Homo sapiens cDNA
8790	21482	34629	0.46	1.0E-113	8922819	NT	Homo sapiens hypothetical protein FLJ11008 (FLJ11008), mRNA

Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8862	21692	34830	3.08	1.0E-113	BE382842.1	EST_HUMAN	601287709F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3627554 5'
8862	21682	34831	3.08	1.0E-113	BE382842.1	EST_HUMAN	601287709F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3627554 5'
8901	21968		0.93	1.0E-113	BE772087.1	EST_HUMAN	RC1-F10134-280600-021-c02 F10134 Homo sapiens cDNA
9730	22381	35583	1.4	1.0E-113	11429367	NT	Homo sapiens transmembrane protein 2 (TMEM2), mRNA
9830	22481	35683	0.45	1.0E-113	M21535.1	NT	Human erg protein (ets-related gene) mRNA, complete cds
9950	22598	35802	0.81	1.0E-113	5453997	NT	Homo sapiens RAN binding protein 7 (RANBP7), mRNA
9950	22598	35803	0.81	1.0E-113	5453997	NT	Homo sapiens RAN binding protein 7 (RANBP7), mRNA
10314	23190	36386	0.61	1.0E-113	AW500517.1	EST_HUMAN	UI-HF-BNO-ak4-b-10-Q-U1r NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3077322 5'
10516	23161	36387	0.55	1.0E-113	BF691687.1	EST_HUMAN	602247740F1 NIH_MGC_62 Homo sapiens cDNA clone IMAGE:4333280 5'
10516	23161	36388	0.55	1.0E-113	BF691687.1	EST_HUMAN	602247740F1 NIH_MGC_62 Homo sapiens cDNA clone IMAGE:4333280 5'
11067	23737	37011	1.83	1.0E-113	AW500519.1	EST_HUMAN	UI-HF-BNO-ak4-b-12-Q-U1r NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3077326 5'
11078	23746	37019	2.84	1.0E-113	AW630291.1	EST_HUMAN	hh81a09.y1 NCL_CGAP_GU1 Homo sapiens cDNA clone IMAGE:2989176 5' similar to TR:O60327 O60327 KIAA0584 PROTEIN;
11078	23746	37020	2.84	1.0E-113	AW630291.1	EST_HUMAN	hh81a09.y1 NCL_CGAP_GU1 Homo sapiens cDNA clone IMAGE:2989176 5' similar to TR:O60327 O60327 KIAA0584 PROTEIN;
11181	18998	31974	1.39	1.0E-113	6006002	NT	Homo sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 2A (GRIN2A) mRNA
11181	18998	31975	1.39	1.0E-113	6006002	NT	Homo sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 2A (GRIN2A) mRNA
11227	23890	37177	2.81	1.0E-113	BE292868.1	EST_HUMAN	601105529F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2988306 5'
11481	24082	37393	1.32	1.0E-113	AA580720.1	EST_HUMAN	nc80b03.r1 NCL_CGAP_GC1 Homo sapiens cDNA clone IMAGE:797069 5' similar to SW:FEN1_HUMAN
11481	24082	37394	1.32	1.0E-113	AA580720.1	EST_HUMAN	nc80b03.r1 NCL_CGAP_GC1 Homo sapiens cDNA clone IMAGE:797069 5' similar to SW:FEN1_HUMAN
630	13408	28045	6.8	1.0E-114	T70551.1	EST_HUMAN	yd15c01.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:108288 3' similar to gb:A21187 ALPHA-2-MACROGLOBULIN PRECURSOR (HUMAN);contains Alu repetitive element;
1049	13808	28468	1.7	1.0E-114	9823087	NT	Homo sapiens hypothetical protein FLJ20080 (FLJ20080), mRNA
1280	14039	28712	5.09	1.0E-114	7857529	NT	Homo sapiens rhabdoid tumor deletion region protein 1 (RTDR1), mRNA
1667	14413	27104	4.27	1.0E-114	6678073	NT	Homo sapiens nucleoporin-like protein 1 (NLP_1), mRNA
2807	12871	25491	1.28	1.0E-114	AB033102.1	NT	Homo sapiens mRNA for KIAA1276 protein, partial cds
2807	12871	25492	1.28	1.0E-114	AB033102.1	NT	Homo sapiens mRNA for KIAA1276 protein, partial cds
3128	15893	28537	2.75	1.0E-114	X04086.1	NT	Human gene for catalase (EC 1.11.1.6) exon 2 mapping to chromosome 11, band p13
3169	15932	28581	1.02	1.0E-114	BF206374.1	EST_HUMAN	601869632F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4100214 5'
3997	16745	28377	2.61	1.0E-114	AF149779.1	NT	Homo sapiens NOD1 protein (NOD1) gene, exons 1, 2, and 3
4358	17096	29731	0.72	1.0E-114	J03171.1	NT	Human Interferon-alpha receptor (HuIFN-alpha-Rec) mRNA, complete cds

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Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5084	17783	30400	1.05	1.0E-114	BE275324.1	EST_HUMAN	601122173F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3346099 5'
5315	18119	30775	1.26	1.0E-114	4506880	NT	Homo sapiens sema domain, seven thrombospondin repeats (type 1 and type 1-like), transmembrane domain (TM) and short cytoplasmic domain, (semaforin) 5A (SEMA5A) mRNA
5315	18119	30776	1.26	1.0E-114	4506890	NT	Homo sapiens sema domain, seven thrombospondin repeats (type 1 and type 1-like), transmembrane domain (TM) and short cytoplasmic domain, (semaforin) 5A (SEMA5A) mRNA
5508	18308	31207	0.97	1.0E-114	9267201	NT	Homo sapiens clathrin, heavy polypeptide-like 1 (CLTCL1), transcript variant 2, mRNA
6134	18912	31881	0.64	1.0E-114	Z26288.1	NT	H. sapiens isoform 1 gene for L-type calcium channel, exon 20
6698	17974	30531	0.62	1.0E-114	4759163	NT	Homo sapiens speractonecin, cwcv and kazal-like domains proteoglycan (testosen) (SPOCK) mRNA
6877	19458	32894	0.95	1.0E-114	AB041533.1	NT	Homo sapiens HCMOGT-1 mRNA for sperm antigen, complete cds
7139	19826	32894	1.02	1.0E-114	AU134187.1	EST_HUMAN	AU134187 OVARC1 Homo sapiens cDNA clone OVARC1001444 5'
7139	19826	32895	1.02	1.0E-114	AU134187.1	EST_HUMAN	AU134187 OVARC1 Homo sapiens cDNA clone OVARC1001444 5'
7182	19898	32941	8.3	1.0E-114	Y18000.1	NT	Homo sapiens NF2 gene
7182	19898	32942	8.3	1.0E-114	Y18000.1	NT	Homo sapiens NF2 gene
7792	20487	33610	2.92	1.0E-114	4557800	NT	Homo sapiens gamma-aminobutyric acid (GABA) A receptor, alpha 2 (GABRA2) mRNA
8067	20761	33899	1.92	1.0E-114	AJ363139.1	EST_HUMAN	qy68406.x1 NCI_CGAP_Brm25 Homo sapiens cDNA clone IMAGE:2017163 3'
8067	20761	33899	1.92	1.0E-114	AJ363139.1	EST_HUMAN	qy68406.x1 NCI_CGAP_Brm25 Homo sapiens cDNA clone IMAGE:2017163 3'
8067	20761	34437	3.81	1.0E-114	U89041.1	NT	Human neural cell adhesion molecule CD56 mRNA, complete cds
8802	21294	34505	6.93	1.0E-114	AB011133.1	NT	Homo sapiens mRNA for KIAA0561 protein, partial cds
8895	21357	34505	6.93	1.0E-114	AB011133.1	NT	Homo sapiens mRNA for KIAA0561 protein, partial cds
8895	21357	34506	6.93	1.0E-114	AB011133.1	NT	Homo sapiens mRNA for KIAA0561 protein, partial cds
9081	21770	34933	0.49	1.0E-114	BF108832.1	EST_HUMAN	789g12.x1 Source NSF F8 GW_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3528847 3' similar to
9314	21981		6.83	1.0E-114	AW327455.1	EST_HUMAN	TR-Q8UH9 Q8UH9 TRANSMEMBRANE PROTEIN 2 ;
9363	20433	33555	2.8	1.0E-114	AF077754.1	NT	dq03705.x1 NIH_MGC_2 Homo sapiens cDNA clone IMAGE:2846744 5'
9448	22125		1.03	1.0E-114	M13536.1	NT	Homo sapiens tyrosine kinase pp60c-arc (SRC) gene, exon 12 and partial cds
10039	22687	35805	1.08	1.0E-114	BE870004.1	EST_HUMAN	Human carboxylase mRNA
10061	22709	35827	1.5	1.0E-114	AL163227.2	NT	601449752F1 NIH_MGC_95 Homo sapiens cDNA clone IMAGE:3853500 5'
10439	23085	36313	0.7	1.0E-114	BE171984.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C027
							Homo sapiens cDNA clone IMAGE:2908086 5' similar to gb:X17206.40S
							ba73g12.y1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:2908086 5' similar to gb:X17206.40S
							MF0-HT0559-250200-002-407 HT0559 Homo sapiens cDNA
							complete (MOUSE);
10687	23378		3.15	1.0E-114	BE302666.1	EST_HUMAN	RIBOSOMAL PROTEIN S4 (HUMAN); gb:M20682 Mouse L1Rep3 protein mRNA from a repetitive element,
10789	23472	36714	1.71	1.0E-114	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CAGNA1E) gene, exons 7-49, and partial cds, alternatively spliced

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
							Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-40, and partial cds, alternatively spliced
10789	23472	38715	1.71	1.0E-114	AF223391.1	NT	AV733454 cdA Homo sapiens cDNA clone cdABA08 5'
11145	23812	37094	3	1.0E-114	AV733454.1	EST_HUMAN	AV733454 cdA Homo sapiens cDNA clone cdABA08 5'
11145	23812	37095	3	1.0E-114	AV733454.1	EST_HUMAN	Homo sapiens LIM HOX gene 2 (LHX2) mRNA
11788	24386	37719	1.7	1.0E-114	4759873	NT	Homo sapiens clathrin, heavy polypeptide-like 1 (CLTCL1), mRNA
11834	24418	37759	1.32	1.0E-114	11528317	NT	Homo sapiens TNF-inducible protein G312-1 (G312-1), mRNA
12334	25402		3.42	1.0E-114	11418041	NT	Homo sapiens hypothetical protein (DJ1042K10.2), mRNA
12577	24902	30988	4.93	1.0E-114	11034950	NT	Homo sapiens hypothetical protein (DJ1042K10.2), mRNA
12577	24902	30989	4.93	1.0E-114	11034950	NT	Homo sapiens HLA-B associated transcript-1 (D6S81E) mRNA
21	12849	25464	2.89	1.0E-115	4758111	NT	Homo sapiens polymerase (RNA) II (DNA directed) polypeptide A (220kD) (POLR2A) mRNA
127	12942	25595	2.03	1.0E-115	4506638	NT	Homo sapiens keratin 18 (KRT18) mRNA
131	12846	25733	2.33	1.0E-115	4557887	NT	Homo sapiens keratin 18 (KRT18) mRNA
286	13092	25733	2.23	1.0E-115	AW804759.1	EST_HUMAN	QV4-UJM0094-300300-156-508 UM0094 Homo sapiens cDNA
523	13307	25639	0.99	1.0E-115	AJ339206.1	EST_HUMAN	q08f01.x1 NCI_CGAP_GC4 Homo sapiens cDNA clone IMAGE:1946809 3' similar to TR:O00536 O00536
523	13307	25639	0.99	1.0E-115	AJ339206.1	EST_HUMAN	TTF-1 INTERACTING PEPTIDE 5;
623	13307	25940	0.99	1.0E-115	AJ339206.1	EST_HUMAN	TTF-1 INTERACTING PEPTIDE 5;
769	13541	26201	1.36	1.0E-115	5174702	NT	Homo sapiens transforming growth factor beta-activated kinase-binding protein 1 (TAB1), mRNA
769	13541	26202	1.36	1.0E-115	5174702	NT	Homo sapiens transforming growth factor beta-activated kinase-binding protein 1 (TAB1), mRNA
771	13543	26204	40.4	1.0E-115	4503794	NT	Homo sapiens ferritin, heavy polypeptide 1 (FTH1) mRNA
1552	14298	26985	1.26	1.0E-115	AF229180.1	NT	Homo sapiens alpha-aminoadipate semialdehyde synthase mRNA, complete cds
1552	14298	26986	1.26	1.0E-115	AF229180.1	NT	Homo sapiens alpha-aminoadipate semialdehyde synthase mRNA, complete cds
1833	14572	27285	1.01	1.0E-115	U78027.1	NT	Homo sapiens Bruton's tyrosine kinase (BTK), alpha-D-galactosidase A (GLA), L44-like ribosomal protein (L44L) and FTP3 (FTP3) genes, complete cds
2078	14810	27541	0.96	1.0E-115	AB007802.1	NT	Homo sapiens KIAA0442 mRNA, partial cds
2298	15023	27758	2.13	1.0E-115	AF231124.1	NT	Homo sapiens testican-1 mRNA, complete cds
2855	15823	28518	1.39	1.0E-115	AW804759.1	EST_HUMAN	QV4-UJM0094-300300-156-508 UM0094 Homo sapiens cDNA
3113	15878	28519	6.22	1.0E-115	AJ245822.1	NT	Homo sapiens mRNA for alpha-tubulin 8 (TUBA8 gene)
3496	16221	28875	6.22	1.0E-115	AJ245822.1	NT	Homo sapiens mRNA for alpha-tubulin 8 (TUBA8 gene)
4021	16767	29397	1.6	1.0E-115	AJ277892.1	NT	Homo sapiens partial TTN gene for titin
4366	17107	29742	3.67	1.0E-115	AB002348.2	NT	Homo sapiens mRNA for KIAA0350 protein, partial cds
4403	17140	29768	3.27	1.0E-115	4768279	NT	Homo sapiens sir2-like 3 (SIRT3), mRNA
4628	17363	29998	2.64	1.0E-115	AL088857.1	NT	Homo sapiens EphA4 (EPHA4) mRNA
							Novel human mRNA from chromosome 1, which has similarities to BAT2 genes



Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4628	17363	29997	2.84	1.0E-115	AL098857.1	NT	Novel human mRNA from chromosome 1, which has similarities to BAT2 genes
4848	17578	30201	3.51	1.0E-115	AL163288.2	NT	Homo sapiens chromosome 21 segment HS21C068
4848	17578	30202	3.51	1.0E-115	AL163288.2	NT	Homo sapiens chromosome 21 segment HS21C068
5283	18069	30698	1.82	1.0E-115	AW970336.1	EST_HUMAN	EST382416 IMAGE resequencing, MAGK Homo sapiens cDNA
5338	18141	30802	0.78	1.0E-115	BF665387.1	EST_HUMAN	802119346F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:4278738 5'
5454	18253	31143	1.98	1.0E-115	11425128	NT	Homo sapiens similar to ER to nucleus signalling 1 (H. sapiens) (LOC63433), mRNA
5454	18253	31144	1.98	1.0E-115	11425128	NT	Homo sapiens similar to ER to nucleus signalling 1 (H. sapiens) (LOC63433), mRNA
5804	18400	31313	1.34	1.0E-115	AI928799.1	EST_HUMAN	au84g01.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2519588 3' similar to gb1L07807 DYNAMIN-1 (HUMAN);
5904	18400	31314	1.34	1.0E-115	AI928799.1	EST_HUMAN	au84g01.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2519588 3' similar to gb1L07807 DYNAMIN-1 (HUMAN);
6108	18945	31916	0.97	1.0E-115	11426786	NT	Homo sapiens sperm surface protein (HSS), mRNA
6108	18945	31917	0.97	1.0E-115	11426786	NT	Homo sapiens sperm surface protein (HSS), mRNA
6302	19075	32081	8.84	1.0E-115	11426038	NT	Homo sapiens similar to ribosomal protein S28 (H. sapiens) (LOC63436), mRNA
6434	19202	32188	2.04	1.0E-115	7861883	NT	Homo sapiens KIAA0054 gene product; Helicase (KIAA0054), mRNA
6434	19202	32199	2.04	1.0E-115	7861883	NT	Homo sapiens KIAA0054 gene product; Helicase (KIAA0054), mRNA
6635	19497	32521	0.83	1.0E-115	T88774.1	EST_HUMAN	yc88b08.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:116085 5' similar to SP-DPOG_YEAST P16801 DNA POLYMERASE GAMMA ;
7178	19884	32935	1.54	1.0E-115	AI076598.1	EST_HUMAN	cc31a06.x1 Soares_tetral_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:1678914 3'
7178	19884	32936	1.54	1.0E-115	AI076598.1	EST_HUMAN	cc31a06.x1 Soares_tetral_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:1678914 3'
7308	19991	33008	8.22	1.0E-115	AB023212.1	NT	Homo sapiens mRNA for KIAA0695 protein, partial cds
8080	20754	33885	13.71	1.0E-115	BE830187.1	EST_HUMAN	RC6-E10081-130700-011-G01 ET0081 Homo sapiens cDNA
8080	20754	33886	13.71	1.0E-115	BE830187.1	EST_HUMAN	RC6-E10081-130700-011-G01 ET0081 Homo sapiens cDNA
8712	21404	34548	2.15	1.0E-115	11434772	NT	Homo sapiens eukaryotic translation initiation factor 4B (EIF4B), mRNA
9675	22327	35522	0.8	1.0E-115	BF382029.1	EST_HUMAN	601816352F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:4050108 5'
9890	22549	35743	2.25	1.0E-115	AB002336.1	NT	Human mRNA for KIAA0338 gene, partial cds
9899	22549	35744	2.25	1.0E-115	AB002336.1	NT	Human mRNA for KIAA0338 gene, partial cds
10418	23064	36284	1	1.0E-115	AI221878.1	EST_HUMAN	qg9e09.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1843336 3'
10418	23064	36285	1	1.0E-115	AI221878.1	EST_HUMAN	qg9e09.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1843336 3'
10428	23072	36293	0.82	1.0E-115	AI524687.1	EST_HUMAN	th12a07.x1 NCI_CGAP_CL11 Homo sapiens cDNA clone IMAGE:2118036 3' similar to TRC016129 O16129 PHENYLALANINE TRNA SYNTHETASE ;
10917	23310	36549	7.62	1.0E-115	AW571644.1	EST_HUMAN	x63208.x1 NCI_CGAP_UH1 Homo sapiens cDNA clone IMAGE:2839239 3' similar to SW:CAYP_CANFA P10463 CALYPTOPHOSINE ;
10989	23549	36787	1.33	1.0E-115	9810279	NT	Homo sapiens UDP-glucose:glycoprotein glucosyltransferase 1 (HUGT1), mRNA

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11225	23888	37174	1.54	1.0E-115	BE045890.1	EST_HUMAN	h54c10.x1 NCI_CGAP_Par3 Homo sapiens cDNA clone IMAGE:3123186 3' similar to TR:O88378 O88378 PRP4 PROTEIN KINASE HOMOLOG;
11225	23888	37175	1.54	1.0E-115	BE045890.1	EST_HUMAN	h54c10.x1 NCI_CGAP_Par3 Homo sapiens cDNA clone IMAGE:3123186 3' similar to TR:O88378 O88378 PRP4 PROTEIN KINASE HOMOLOG;
11374	23981	37261	2.27	1.0E-115	4502528	NT	Homo sapiens calcium channel, voltage-dependent, alpha 1E subunit (CACNA1E) mRNA
11775	24383	37659	2.53	1.0E-115	BE255649.1	EST_HUMAN	60111744F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3352379 5'
11842	24426	37767	1.63	1.0E-115	AW894376.1	EST_HUMAN	QV3-OT0065-200300-137-112 OT0065 Homo sapiens cDNA
11920	24481		2.16	1.0E-115	AF240786.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
559	13341	25069	1.98	1.0E-116	BE275802.1	EST_HUMAN	601121347F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:2988875 5'
783	13555	26216	2.21	1.0E-116	4507334	NT	Homo sapiens synaptotagmin 1 (SYNJ1), mRNA
839	13009		1.76	1.0E-116	4507334	NT	Homo sapiens synaptotagmin 1 (SYNJ1), mRNA
1990	14726	27447	2.55	1.0E-116	5174478	NT	Homo sapiens pericentrin (PCNT) mRNA
1990	14726	27448	2.55	1.0E-116	5174478	NT	Homo sapiens pericentrin (PCNT) mRNA
2090	15585	27552	2.6	1.0E-116	M19824.1	NT	Human apolipoprotein B-100 (apoB) gene, exons 17 and 18
2090	15585	27553	2.6	1.0E-116	M19824.1	NT	Human apolipoprotein B-100 (apoB) gene, exons 17 and 18
2305	15030	27767	1.95	1.0E-116	6463941	NT	Homo sapiens protein phosphatase, EF hand calcium-binding domain 1 (PPEF1) mRNA
2340	15083		1.36	1.0E-116	U78308.1	NT	Human olfactory receptor cDNA 17-201-1 (OR17-201-1) gene, olfactory receptor cDNA 17-32 (OR17-32) gene and olfactory receptor pseudo_cDNA 17-01 (OR17-01) pseudogene, complete cds
2458	15176	27915	2.84	1.0E-116	AB018333.1	NT	Homo sapiens mRNA for KIAA0790 protein, partial cds
2738	15533	28183	1.53	1.0E-116	BE689256.1	EST_HUMAN	601513337F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3914600 5'
3171	15934	28582	4.87	1.0E-116	L77570.1	NT	Homo sapiens DiGeorge syndrome critical region, centromeric end
3171	15934	28583	4.87	1.0E-116	L77570.1	NT	Homo sapiens DiGeorge syndrome critical region, centromeric end
4345	17094	29713	2.43	1.0E-116	5031954	NT	Homo sapiens sodium phosphate transporter 3 (NPT3) mRNA
4803	17534	30158	1.57	1.0E-116	AB070896.1	EST_HUMAN	PM-BT135-070499-016 BT135 Homo sapiens cDNA
5197	18005	30827	0.87	1.0E-116	AB02062.1	EST_HUMAN	q19d04.x1 NCI_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1898896 3' similar to contains element MER25 repetitive element;
5889	18674	31619	4.4	1.0E-116	W42822.1	EST_HUMAN	zc24d07.r1 Soares senescent fibroblasts NBH5F Homo sapiens cDNA clone IMAGE:323245 5' similar to SW:MDHM_MOUSE P08249 MALATE DEHYDROGENASE, MITOCHONDRIAL PRECURSOR;
6117	18895	31862	1.8	1.0E-116	AB046856.1	NT	Homo sapiens mRNA for KIAA1636 protein, partial cds
6117	18895	31863	1.8	1.0E-116	AB046856.1	NT	Homo sapiens mRNA for KIAA1636 protein, partial cds
6184	18951	31934	0.76	1.0E-116	BE408097.1	EST_HUMAN	601302281F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3636764 5'
6421	19189		1.55	1.0E-116	BE158133.1	EST_HUMAN	MR2-HT0379-210200-102-504 HT0379 Homo sapiens cDNA

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6844	19644	32572	1.19	1.0E-118	C02844.1	EST_HUMAN	C02844 Human heart cDNA (Ynakamura) Homo sapiens cDNA clone 3NH00567
7102	19780	32855	5.74	1.0E-118	AV718314.1	EST_HUMAN	AV718314 DCB Homo sapiens cDNA clone DCB8CG08 5'
8267	20861	34101	1.37	1.0E-116	AA354258.1	EST_HUMAN	EST02885 Jurkat T-cells V Homo sapiens cDNA 5' end similar to keratin 2
8267	20861	34102	1.37	1.0E-116	AA354258.1	EST_HUMAN	EST02885 Jurkat T-cells V Homo sapiens cDNA 5' end similar to keratin 2
8378	21071	34209	0.98	1.0E-118	A1904151.1	EST_HUMAN	GM-BT043-090298-075 BT043 Homo sapiens cDNA
8836	21528	34674	1.86	1.0E-116	BE565607.1	EST_HUMAN	601338268F1 NIH_MGC_33 Homo sapiens cDNA clone IMAGE:3680680 5'
8997	21687	34637	1.81	1.0E-118	A1218352.1	EST_HUMAN	q109c05.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1844168 3' similar to gb:X63741.maf1 FIBULIN-1, ISOFORM A PRECURSOR (HUMAN);
9573	22220	35411	1.52	1.0E-118	A1218848	NT	Homo sapiens laminin, alpha 2 (merotin, congenital muscular dystrophy) (LAMA2), mRNA
10170	22818	36038	0.74	1.0E-118	AJ277441.1	NT	Homo sapiens partial mRNA for xylosyltransferase I (XT-I) gene
10170	22818	36037	0.74	1.0E-118	AJ277441.1	NT	Homo sapiens partial mRNA for xylosyltransferase I (XT-I) gene
10240	22894	36104	0.78	1.0E-116	BE158813.1	EST_HUMAN	QV4-H70401-281289-063-c09 HT0401 Homo sapiens cDNA
10586	23281	36519	2.4	1.0E-118	BF335849.1	EST_HUMAN	CM2-CT0482-300800-348-608 CT0482 Homo sapiens cDNA
11080	23750	37025	2.85	1.0E-118	A1367140.1	EST_HUMAN	q441e04.x1 Soares_NhHMPu_S1 Homo sapiens cDNA clone IMAGE:1836102 3' similar to WP-B0495.7
12625	25267		1.86	1.0E-118	AL134889.1	EST_HUMAN	CE01785;
545	13328	25659	1.67	1.0E-117	4828636	NT	DKFZp762L1110.1 702 (synonym: hmi2) Homo sapiens cDNA clone DKFZp762L1110 5'
1055	15559	28474	0.96	1.0E-117	AF124393.1	NT	Homo sapiens acetyl-Coenzyme A carboxylase alpha (ACACA), mRNA
1747	14489	27188	1.02	1.0E-117	AF123320.1	NT	Mus musculus fragile-X-related protein 1 (Fxrh) gene, exons 13a through 15
1823	14582	27274	1.51	1.0E-117	M19816.1	NT	Homo sapiens lymphocyte activation-associated protein mRNA, complete cds
2208	14938	27674	1.54	1.0E-117	AW957899.1	EST_HUMAN	Human apolipoprotein B-100 (apoB) gene, exon 10
3262	16024	28674	1.64	1.0E-117	AA978114.1	EST_HUMAN	EST339768 MAGE resequences, MAGE Homo sapiens cDNA
3971	16720	28355	2.1	1.0E-117	AA318723.1	EST_HUMAN	op32c11.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1578548 3'
4310	17049	28674	2.03	1.0E-117	8659564	NT	EST188414 HCC cell line (metastasis to liver in mouse) II Homo sapiens cDNA 5' end similar to ribosomal protein L29
4538	17273	28905	2.95	1.0E-117	AL042120.1	EST_HUMAN	Homo sapiens collagen, type IV, alpha 5 (Alport syndrome) (COL4A5), mRNA
4674	17408	30043	1.27	1.0E-117	X89870.1	NT	DKFZp434C1120.1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434C1120 5'
4674	17408	30044	1.27	1.0E-117	X89670.1	NT	H. sapiens mRNA for TPCR16 protein
4759	17491	30119	10.03	1.0E-117	AF134304.2	NT	H. sapiens mRNA for TPCR16 protein
4759	17491	30120	10.03	1.0E-117	AF134304.2	NT	H. sapiens Scar2 (SCAR2) gene, partial cds
4887	17614	30233	3.57	1.0E-117	AB020673.1	NT	Homo sapiens Scar2 (SCAR2) gene, partial cds
5136	17854	30471	0.73	1.0E-117	8612461	NT	Homo sapiens mRNA for KIAA0868 protein, complete cds
5284	18070	30689	3.01	1.0E-117	BE730508.1	EST_HUMAN	Homo sapiens atrophin-1 interacting protein 1; activin receptor interacting protein 1 (KIAA0705), mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6860	17837	30574	0.86	1.0E-117	AA323348.1	EST_HUMAN	EST26111 Cerebellum II Homo sapiens cDNA 5' end similar to similar to zinc finger domain
7350	20031	33108	5.01	1.0E-117	L76571.1	NT	Homo sapiens nuclear hormone receptor (shp) gene, 3' end of cds
7350	20031	33109	5.01	1.0E-117	L76571.1	NT	Homo sapiens nuclear hormone receptor (shp) gene, 3' end of cds
7446	20122	33212	1.75	1.0E-117	AV717788.1	EST_HUMAN	AV717788 DGB Homo sapiens cDNA clone DCBBAE01 5'
7446	20122	33213	1.75	1.0E-117	AV717788.1	EST_HUMAN	AV717788 DGB Homo sapiens cDNA clone DCBBAE01 5'
7878	20573	33689	3.38	1.0E-117	AI650145.1	EST_HUMAN	wp86507.x1 NCI CGAP Brn25 Homo sapiens cDNA clone IMAGE:2468628 3' similar to TR:075085
8210	20804	34039	2.28	1.0E-117	10834989	NT	O75085 KIAA0477 PROTEIN. ;
8210	20804	34040	2.29	1.0E-117	10834989	NT	Homo sapiens neural cell adhesion molecule 1 (NCAM1), mRNA
8310	21004	34141	0.56	1.0E-117	AI604181.1	EST_HUMAN	Homo sapiens neural cell adhesion molecule 1 (NCAM1), mRNA
8310	21004	34142	0.56	1.0E-117	AI604181.1	EST_HUMAN	CM-BT043-090289-075 BT043 Homo sapiens cDNA
9199	21898	35033	2.25	1.0E-117	D16524.1	NT	CM-BT043-090289-075 BT043 Homo sapiens cDNA
9688	22338	35332	2.07	1.0E-117	BE733822.1	EST_HUMAN	Human gene for very low density lipoprotein receptor, exon 11
9846	25127	35987	2.9	1.0E-117	AF090033.1	NT	60156317F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3843748 5'
10468	23115	36346	1.11	1.0E-117	11420222	NT	Homo sapiens gamma-aminobutyric acid type B receptor 2 (GABABR2) mRNA, complete cds
10765	23449	36991	1.77	1.0E-117	D83776.1	NT	Homo sapiens Drosophila Kelch like protein (DKELCHL), mRNA
10894	23640	36991	2.68	1.0E-117	11424835	NT	Human mRNA for KIAA0191 gene, partial cds
10894	23640	36992	2.68	1.0E-117	11424835	NT	Homo sapiens protein (peptidyl-prolyl cis/trans isomerase) NIMA-interacting 1 (PIN1), mRNA
11243	23905	37190	3.32	1.0E-117	AB011541.1	NT	Homo sapiens protein (peptidyl-prolyl cis/trans isomerase) NIMA-interacting 1 (PIN1), mRNA
11309	23976	37197	3.32	1.0E-117	AB011541.1	NT	Homo sapiens mRNA for MEGF8, partial cds
11587	24186	37501	14.73	1.0E-117	BE269856.1	EST_HUMAN	Homo sapiens mRNA for MEGF8, partial cds
11587	24186	37502	2.02	1.0E-117	4501848	NT	Homo sapiens mRNA for MEGF8, partial cds
88	12808	25530	5.98	1.0E-118	AF161500.1	NT	Homo sapiens HSPC151 mRNA, complete cds
94	12920	25557	2.13	1.0E-118	AL045854.1	EST_HUMAN	DKFZp4341056_r1 434 (synonym: hsc3) Homo sapiens cDNA clone DKFZp4341056 5'
504	13288	25922	5.87	1.0E-118	7657019	NT	Homo sapiens hypothetical protein (D328E19.C1.1), mRNA
894	15555	26328	0.86	1.0E-118	BE398705.1	EST_HUMAN	Homo sapiens hypothetical protein (D328E19.C1.1), mRNA
2227	14955	27693	2.04	1.0E-118	BE398705.1	EST_HUMAN	Homo sapiens etha oculis hornedbox (Drosophila) homolog 1 (SIX1) mRNA
2227	14955	27694	2.04	1.0E-118	BE398705.1	EST_HUMAN	Homo sapiens etha oculis hornedbox (Drosophila) homolog 1 (SIX1) mRNA
2227	14955	27695	2.04	1.0E-118	BE398705.1	EST_HUMAN	601281947F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3604019 5'
2329	15054	28189	1.68	1.0E-118	AW951729.1	EST_HUMAN	601281947F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3604019 5'
2744	15450	28189	2.61	1.0E-118	U07000.1	NT	601281947F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3604019 5'
2744	15450	28189	2.61	1.0E-118	U07000.1	NT	Human breakpoint cluster region (BCR) gene, complete cds
3102	15857		4.64	1.0E-118	Y13932.1	NT	Human breakpoint cluster region (BCR) gene, complete cds

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3190	15953	28605	4.67	1.0E-118	A1347694.1	EST_HUMAN	qp01f05.x1 NCI_OGAP_Kid5 Homo sapiens cDNA clone IMAGE:1916789 3'
3190	15953	28606	4.67	1.0E-118	A1347694.1	EST_HUMAN	qp01f05.x1 NCI_OGAP_Kid5 Homo sapiens cDNA clone IMAGE:1916789 3'
4067	15811	29439	4.77	1.0E-118	D23060.1	NT	Human mRNA for ribosomal protein, complete cds
4659	17393	30028	0.9	1.0E-118	11425793	NT	Human mRNA for KIAA0478 gene product (KIAA0478), mRNA
5337	18140	30800	1.87	1.0E-118	AF142624.1	NT	Homo sapiens calcium channel gamma 4 subunit (CACNG4) gene, exon 3
5337	18140	30801	1.87	1.0E-118	AF142624.1	NT	Homo sapiens calcium channel gamma 4 subunit (CACNG4) gene, exon 3
5543	18340	31247	0.94	1.0E-118	11422054	NT	Homo sapiens reelin (RELN), mRNA
5543	18340	31248	0.94	1.0E-118	11422054	NT	Homo sapiens reelin (RELN), mRNA
5684	18477	31395	1.24	1.0E-118	M55109.1	NT	Human cyclic fibrosis transmembrane conductance regulator (CFTR) gene, exon 4
5772	18563	31491	0.83	1.0E-118	11425900	NT	Homo sapiens T-box 4 (TBX4), mRNA
5772	18563	31492	0.83	1.0E-118	11425900	NT	Homo sapiens T-box 4 (TBX4), mRNA
5853	18640	31576	1.49	1.0E-118	11420794	NT	Homo sapiens transient receptor potential channel 5 (TRPC5), mRNA
6592	19355	32368	1.44	1.0E-118	4557732	NT	Homo sapiens latent transforming growth factor beta binding protein 2 (LTBP2) mRNA
6592	19355	32369	1.44	1.0E-118	4557732	NT	Homo sapiens latent transforming growth factor beta binding protein 2 (LTBP2) mRNA
6997	19689	32738	1.12	1.0E-118	AL043761.1	EST_HUMAN	DKFZp434O0127.1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434O0127 5'
6997	19689	32739	1.12	1.0E-118	AL043761.1	EST_HUMAN	DKFZp434O0127.1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434O0127 5'
7500	20172	33284	5.63	1.0E-118	11431050	NT	Homo sapiens chromosome 2 open reading frame 3 (C2ORF3), mRNA
7733	20397	33512	0.86	1.0E-118	BF685272.1	EST_HUMAN	602141620F1 NIH_MGC_46 Homo sapiens cDNA clone IMAGE:4302749 5'
7872	20567	33693	2.17	1.0E-118	BE781223.1	EST_HUMAN	601469159F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3872247 5'
8282	20976	34116	6.58	1.0E-118	BE062855.1	EST_HUMAN	QV0-BT0263-060200-097-h03 BT0263 Homo sapiens cDNA
8282	20976	34117	6.58	1.0E-118	BE062855.1	EST_HUMAN	QV0-BT0263-060200-097-h03 BT0263 Homo sapiens cDNA
8288	20982	34122	1.37	1.0E-118	AA443024.1	EST_HUMAN	z698d07.1 Soares_NIHMPu_S1 Homo sapiens cDNA clone IMAGE:811789 5'
8288	20982	34123	1.37	1.0E-118	AA443024.1	EST_HUMAN	z698d07.1 Soares_NIHMPu_S1 Homo sapiens cDNA clone IMAGE:811789 5'
8573	21265	34404	1.01	1.0E-118	AB002381.1	NT	Human mRNA for KIAA0363 gene, partial cds
8573	21265	34405	1.01	1.0E-118	AB002381.1	NT	Human mRNA for KIAA0363 gene, partial cds
8621	21313	34455	2.06	1.0E-118	4557732	NT	Homo sapiens latent transforming growth factor beta binding protein 2 (LTBP2) mRNA
8621	21313	34456	2.06	1.0E-118	4557732	NT	Homo sapiens latent transforming growth factor beta binding protein 2 (LTBP2) mRNA
8633	21624	34767	4.95	1.0E-118	BE263134.1	EST_HUMAN	601144883F2 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3160502 5'
8664	21655	34806	0.55	1.0E-118	AL048474.2	EST_HUMAN	DKFZp588K1824.1 588 (synonym: huter1) Homo sapiens cDNA clone DKFZp588K1824
9493	22146	35327	1.53	1.0E-118	7957018	NT	Homo sapiens hypothetical protein (DJ328E19.G1.1), mRNA
9886	22536	35731	0.98	1.0E-118	AL13321.1	EST_HUMAN	DKFZp5470017.1 547 (synonym: hfor1) Homo sapiens cDNA clone DKFZp5470017 5'
10274	22922	36134	1.86	1.0E-118	BF186407.1	EST_HUMAN	7m17e09.x1 NCI_OGAP_Bm23 Homo sapiens cDNA clone IMAGE:3564785 3' similar to SW:ZF3A_HUMAN P21754 ZONA PELLUCIDA SPERM-BINDING PROTEIN 3A PRECURSOR;

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10365	23012	36227	0.46	1.0E-118	AW271289.1	EST_HUMAN	xx46a10.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2772898 3' similar to
10431	23077	36300	0.65	1.0E-118	AW296351.1	EST_HUMAN	SW_BODG_HUMAN 076836 GAMMA-BUTYROBETAINE-2-OXOGLUTARATE DIOXYGENASE ;
11206	23889	37165	1.61	1.0E-118	BF686214.1	EST_HUMAN	UJ-H-BWO-a0-07-0-UJ.a1 NCI_CGAP_Sub6 Homo sapiens cDNA clone IMAGE:2729772 3'
11236	23899	37188	1.8	1.0E-118	11055988	NT	902141620F1 NIH_MGC_46 Homo sapiens cDNA clone IMAGE:4302798 5'
11246	23908	37201	10.23	1.0E-118	AA315007.1	EST_HUMAN	Homo sapiens protein with polyglutamine repeat calcium (ca2+) homeostasis endoplasmic reticulum protein (ERPR0T213-21), mRNA
11548	24147	37457	1.68	1.0E-118	BE908678.1	EST_HUMAN	EST188814 HCC cell line (metastasis to liver in mouse) II Homo sapiens cDNA 5' end similar to dynein, light chain 1, cytoplasmic
11548	24147	37458	1.68	1.0E-118	BE908678.1	EST_HUMAN	501499514F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3901563 5'
11551	24150	37461	1.61	1.0E-118	BF686387.1	EST_HUMAN	601499514F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3901563 5'
11551	24150	37462	1.61	1.0E-118	BF686387.1	EST_HUMAN	QV0-UJ0091-120900-385-b12 UJ0091 Homo sapiens cDNA
741	13514	28173	0.97	1.0E-119	AF170492.1	NT	QV0-UJ0091-120900-385-b12 UJ0091 Homo sapiens cDNA
1014	16558	28433	1.61	1.0E-119	7705807	NT	Homo sapiens chloride channel CLC4 (CLC4) mRNA, complete cds
1828	14692	27374	5.97	1.0E-119	AB023147.1	NT	Homo sapiens CGI-105 protein (LOC51011), mRNA
3099	15864	28508	1.57	1.0E-119	8022205	NT	Homo sapiens mRNA for KIAA0890 protein, partial cds
3234	15990		0.8	1.0E-119	AA916760.1	EST_HUMAN	Homo sapiens hypothetical protein FLJ10052 (FLJ10052), mRNA
3934	16684	28025	1.42	1.0E-119	4504118	NT	on10605.a1 NCI_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1556241 3' similar to WP:E04F6.2
5253	18059	30888	2.5	1.0E-119	AU133399.1	EST_HUMAN	CE01214 ;
5286	18072	30701	21.82	1.0E-119	M89914.1	NT	Homo sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1) mRNA
5270	18076	30708	3.11	1.0E-119	BE636121.1	EST_HUMAN	AU133399 NT2RP4 Homo sapiens cDNA clone NT2RP4001991 5'
5347	18150	30830	1.63	1.0E-119	AV683731.1	EST_HUMAN	Human neurofibromin (NF1) gene, complete cds
5503	18301	31201	0.63	1.0E-119	AL134903.1	EST_HUMAN	RC1-NN0073-250800-018-g06 NN0073 Homo sapiens cDNA
5503	18301	31202	0.63	1.0E-119	AL134903.1	EST_HUMAN	AV683731 GKc Homo sapiens cDNA clone GKCDH803 5'
8036	18816	31776	7.67	1.0E-119	AI150703.1	EST_HUMAN	DKFZp762M0710_r1 762 (synonym: hmel2) Homo sapiens cDNA clone DKFZp762M0710 5'
6190	18997	31940	0.92	1.0E-119	AF315933.1	NT	DKFZp762M0710_r1 762 (synonym: hmel2) Homo sapiens cDNA clone DKFZp762M0710 5'
6190	18997	31941	0.92	1.0E-119	AF315933.1	NT	q677c06.x1 Soares_fetal_NHH19W Homo sapiens cDNA clone IMAGE:1706128 3' similar to
6239	19013	31987	0.85	1.0E-119	AI476732.1	EST_HUMAN	SW_K1CJ_MOUSE P02635 KERATIN, TYPE I CYTOSKELETAL 10 ;
6370	19139	32135	2.62	1.0E-119	X06262.1	NT	Homo sapiens matrix metalloproteinase 28 (MMP28) mRNA, complete cds
6380	19149	32148	4.69	1.0E-119	AW974193.1	EST_HUMAN	Homo sapiens matrix metalloproteinase 28 (MMP28) mRNA, complete cds
7310	19693	33070	1.5	1.0E-119	BE790614.1	EST_HUMAN	Human c-fos-like proto-oncogene
8590	21252	34390	1.19	1.0E-119	BE615150.1	EST_HUMAN	EST1386296 IMAGE resequences, MAGM Homo sapiens cDNA
							601592005F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3946081 5'
							601280558F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3922528 5'

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9807	22458	35863	1.15	1.0E-119	11038843	NT	Homo sapiens KIAA0477 gene product (KIAA0477), mRNA
10006	22654	35867	0.55	1.0E-119	A1149706.1	EST_HUMAN	qf43at11.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1752764 3' similar to TR-Q13458
10148	22794	36008	3.35	1.0E-119	AA465124.1	EST_HUMAN	Q13458 GUANINE NUCLEOTIDE EXCHANGE FACTOR PROTEIN TRIO. ;
10401	23047	36283	1.29	1.0E-119	AJ297701.1	NT	ss3205J1 NCI_OGAP_GCB1 Homo sapiens cDNA clone IMAGE:814977 5'
10443	23089	36317	0.71	1.0E-119	11425837	NT	Homo sapiens partial IL-12RB1 gene for IL-12 receptor beta1 chain, exons 16-17
10443	23089	36318	0.71	1.0E-119	11425837	NT	Homo sapiens hypothetical protein FLJ10206 (FLJ10206), mRNA
10517	23163	36360	4.16	1.0E-119	AB032261.1	NT	Homo sapiens Sod mRNA for citroryl-CoA desaturase, complete cds
10885	23680	36913	2.38	1.0E-119	AJ297701.1	NT	Homo sapiens partial IL-12RB1 gene for IL-12 receptor beta1 chain, exons 16-17
10885	23680	36914	2.38	1.0E-119	AJ297701.1	NT	Homo sapiens partial IL-12RB1 gene for IL-12 receptor beta1 chain, exons 16-17
11159	23828		6.31	1.0E-119	BF569571.1	EST_HUMAN	602186072F1 NIH_MGC_45 Homo sapiens cDNA clone IMAGE:4310633 5'
12198	25326		2.16	1.0E-119	AW847519.1	EST_HUMAN	RC3-CTD212-240889-011-403 CT0212 Homo sapiens cDNA
204	13100	25741	1.43	1.0E-120	4507334	NT	Homo sapiens synaptotagmin 1 (SYNJ1), mRNA
1018	13778	26439	2.49	1.0E-120	AF248540.1	NT	Homo sapiens intersectin 2 (SH3D1B) mRNA, complete cds
1018	13778	26440	2.49	1.0E-120	AF248540.1	NT	Homo sapiens intersectin 2 (SH3D1B) mRNA, complete cds
1405	14152	26832	2.31	1.0E-120	N44873.1	EST_HUMAN	yy40g12.1 Soares melanocyte 2NBHM Homo sapiens cDNA clone IMAGE:273768 5'
1597	14343	27033	3.08	1.0E-120	AF167706.1	NT	Homo sapiens cysteine-rich repeat-containing protein S82 precursor, mRNA, complete cds
1799	14539	27250	1.21	1.0E-120	4557250	NT	Homo sapiens disintegrin and metalloprotease domain 10 (ADAM10) mRNA
2100	14831	27585	0.92	1.0E-120	AB011390.1	NT	Homo sapiens gene for AF-6, complete cds
2100	14831	27586	0.92	1.0E-120	AB011390.1	NT	Homo sapiens gene for AF-6, complete cds
2831	15247	27985	5.24	1.0E-120	4755124	NT	Homo sapiens aquaporin 4 (AQP4), splice variant b, mRNA
3302	13100	25741	1.59	1.0E-120	4507334	NT	Homo sapiens synaptotagmin 1 (SYNJ1), mRNA
4325	17064	28982	1.95	1.0E-120	AF059460.1	NT	Homo sapiens cAMP-specific phosphodiesterase 8A (PDE8A) mRNA, partial cds
4325	17064	28983	1.95	1.0E-120	AF059460.1	NT	Homo sapiens cAMP-specific phosphodiesterase 8A (PDE8A) mRNA, partial cds
4814	17349	29083	2.22	1.0E-120	AF098463.1	NT	Homo sapiens stanniocalcin (STC) gene, partial cds
4814	17349	29084	2.22	1.0E-120	AF098463.1	NT	Homo sapiens stanniocalcin (STC) gene, partial cds
5065	17784	30401	1.36	1.0E-120	4504116	NT	Homo sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1) mRNA
5133	17851	30468	0.9	1.0E-120	A1190903.1	EST_HUMAN	qf81f03.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1739881 3'
5649	18444	31357	16.61	1.0E-120	BF568222.1	EST_HUMAN	602183904F1 NIH_MGC_42 Homo sapiens cDNA clone IMAGE:4300174 5'
5649	18444	31358	16.61	1.0E-120	BF568222.1	EST_HUMAN	602183904F1 NIH_MGC_42 Homo sapiens cDNA clone IMAGE:4300174 5'
6350	19120	32110	0.57	1.0E-120	M29428.1	NT	Human P-glycoprotein (MDR1) gene, exons 6 and 7
6350	19120	32111	0.57	1.0E-120	M29428.1	NT	Human P-glycoprotein (MDR1) gene, exons 6 and 7
7471	20144	33236	1.77	1.0E-120	D34619.1	NT	Human TBXAS1 gene for thromboxane synthase, exon 7
7795	20480	33612	5.22	1.0E-120	V00067.1	NT	Human gene for neurofilament subunit M (NF-M)

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7795	20480	33613	5.22	1.0E-120	Y00067.1	NT	Human gene for neurofilament subunit M (NF-M)
8230	20824	34063	2.43	1.0E-120	BF337589.1	EST_HUMAN	60203352F1 NC1 CGAP_Brm4 Homo sapiens cDNA clone IMAGE:4183333 5'
8303	20997	34135	0.85	1.0E-120	AB033057.1	NT	Homo sapiens mRNA for KIAA1231 protein, partial cds
8303	20997	34136	0.85	1.0E-120	AB033057.1	NT	Homo sapiens mRNA for KIAA1231 protein, partial cds
8307	21001	34138	2.33	1.0E-120	AB007984.1	NT	Homo sapiens mRNA, chromosome 1 specific transcript KIAA0495
8307	21001	34139	2.33	1.0E-120	AB007984.1	NT	Homo sapiens mRNA, chromosome 1 specific transcript KIAA0495
8352	21046	34182	1.17	1.0E-120	AB007934.1	NT	Homo sapiens mRNA for KIAA0495 protein, partial cds
9401	22063	35233	5.26	1.0E-120	BE392102.1	EST_HUMAN	601307739F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3625544 5'
9401	22063	35234	5.26	1.0E-120	BE392102.1	EST_HUMAN	601307739F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3625544 5'
9645	22297	35492	3.75	1.0E-120	BF308641.1	EST_HUMAN	601888988F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4122876 5'
9680	22312	35510	8.25	1.0E-120	AJ133205.1	EST_HUMAN	AU133205 NT2RP4 Homo sapiens cDNA clone NT2RP4007541 5'
9677	22329	35525	0.79	1.0E-120	AL049801.1	NT	Novel human gene mapping to chromosome 19, similar to rat RhoGAP
9792	22443	35831	0.84	1.0E-120	AJ004151.1	EST_HUMAN	GM-BT043-060298-075 BT043 Homo sapiens cDNA
9976	22824	36831	2.55	1.0E-120	AB029000.1	NT	Homo sapiens mRNA for KIAA1077 protein, partial cds
11071	23741	37015	3.72	1.0E-120	BE296387.1	EST_HUMAN	601178727F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3632015 5'
11316	24007	37311	2.06	1.0E-120	BE867819.1	EST_HUMAN	601443136F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3847281 5'
11316	24007	37312	2.08	1.0E-120	BE867819.1	EST_HUMAN	601443136F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3847281 5'
11650	24247	37567	1.38	1.0E-120	U94774.1	NT	Human muscle glycogen phosphorylase (PYGM) gene, 5'UTR and exon 1
71	12868	25534	1.06	1.0E-121	Y18000.1	NT	Homo sapiens NF2 gene
369	13165	26908	0.83	1.0E-121	AU134963.1	EST_HUMAN	AU134963 PLACE1 Homo sapiens cDNA clone PLACE1000899 5'
707	15549	26130	1.31	1.0E-121	5032192	NT	Homo sapiens TNF receptor-associated factor 1 (TRAF1) mRNA
1568	14315	27001	2.81	1.0E-121	AB011153.1	NT	Homo sapiens mRNA for KIAA0651 protein, partial cds
1958	14694	27407	1.33	1.0E-121	4755139	NT	Homo sapiens inositol polyphosphate-4-phosphatase, type I, 107KD (INPP4A), splice variant a, mRNA
1958	14694	27407	1.33	1.0E-121	4755139	NT	Homo sapiens inositol polyphosphate-4-phosphatase, type I, 107KD (INPP4A), splice variant a, mRNA
1984	14700	27416	1.18	1.0E-121	M85908.1	NT	Human prothormone converting enzyme (NEC2) gene, exon 9
1984	14700	27416	1.18	1.0E-121	M85908.1	NT	Human prothormone converting enzyme (NEC2) gene, exon 9
2095	14828	27659	1.51	1.0E-121	L76631.1	NT	Homo sapiens metabotropic glutamate receptor 1 beta (mGluR1beta) mRNA, complete cds
3079	15844	28486	3.61	1.0E-121	Y19208.1	NT	Homo sapiens HBB gene for hair keratin, exons 1 to 9
3079	15844	28486	3.61	1.0E-121	Y19208.1	NT	Homo sapiens HBB gene for hair keratin, exons 1 to 9
3079	15844	28487	3.51	1.0E-121	Y19208.1	NT	Homo sapiens mRNA for KIAA1337 protein, partial cds
3525	16281	28636	1.19	1.0E-121	AB037758.1	NT	Homo sapiens mRNA for KIAA1337 protein, partial cds
3525	16281	28637	1.19	1.0E-121	AB037758.1	NT	Homo sapiens mRNA for KIAA1337 protein, partial cds
3686	16419	29090	7.36	1.0E-121	AF155156.2	NT	Homo sapiens adaptor-related protein complex AP-4 epsilon subunit mRNA, complete cds



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Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4296	17035	29663	2	1.0E-121	AI263294.1	EST_HUMAN	qp67b01.x1 NCI_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2005417 3'
4919	17647	30269	3.24	1.0E-121	X91937.1	NT	H. sapiens ECE-1 gene (exon 17)
5186	17894	30510	0.97	1.0E-121	BE222250.1	EST_HUMAN	hu09f08.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3189119 3'
5474	18273	31167	0.85	1.0E-121	BE271424.1	EST_HUMAN	601140485F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3049820 5'
6524	19290	32294	0.91	1.0E-121	M61463.1	NT	Human glucose transporter (GLUT4) gene, complete cds
6788	19532		0.68	1.0E-121	AJ271736.1	NT	Homo sapiens Xq pseudosubtelomeric region; segment 2/2
6896	17843	30537	1.78	1.0E-121	AW898086.1	EST_HUMAN	RC3-NN00088-270400-011-402 NN00088 Homo sapiens cDNA
6896	17943	30538	1.78	1.0E-121	AW898086.1	EST_HUMAN	RC3-NN00088-270400-011-402 NN00088 Homo sapiens cDNA
7838	20533	33090	2.11	1.0E-121	11436217	NT	Homo sapiens gamma-aminobutyric acid (GABA) A receptor, alpha 2 (GABRA2), mRNA
7842	20537	33864	2.45	1.0E-121	D84122.1	NT	Homo sapiens DNA for prostacyclin synthase, exon 8
7842	20537	33866	2.45	1.0E-121	D84122.1	NT	Homo sapiens DNA for prostacyclin synthase, exon 8
9758	22409	35615	1.21	1.0E-121	AW583858.1	EST_HUMAN	la05g05.y1 Human Pancreatic islets Homo sapiens cDNA 5' similar to TR:076457 075457 CYTOSOLIC PHOSPHOLIPASE A2-GAMMA.
9758	22409	35616	1.21	1.0E-121	AW583858.1	EST_HUMAN	la05g05.y1 Human Pancreatic islets Homo sapiens cDNA 5' similar to TR:076457 075457 CYTOSOLIC PHOSPHOLIPASE A2-GAMMA.
10675	23366	36609	2.95	1.0E-121	11427788	NT	Homo sapiens COX11 (yeast) homolog, cytochrome c oxidase assembly protein (COX11), mRNA
10683	23374	36616	1.28	1.0E-121	AF064200.1	NT	Homo sapiens UDP-glucuronosyltransferase 2B4 precursor (UGT2B4) mRNA, UGT2B4*E458 allele, complete cds
10689	23569	36820	3.46	1.0E-121	7330334	NT	Homo sapiens chloride intracellular channel 4 like (CLIC4L), mRNA
10917	23597	36844	2.53	1.0E-121	N59624.1	EST_HUMAN	W74c07.1 St. Soares fetal liver spleen 1NFSL Homo sapiens cDNA clone IMAGE:248448 3'
11309	23968	37269	2.83	1.0E-121	AU118320.1	EST_HUMAN	AU118320 HEMBA1 Homo sapiens cDNA clone HEMBA1005638 5'
261	13069	25707	2.28	1.0E-122	11528176	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1), mRNA
327	13128	25763	2.63	1.0E-122	AF114486.1	NT	Homo sapiens Intersectin short isoform (ITSN) mRNA, complete cds
348	13147	25787	2.14	1.0E-122	11528176	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1), mRNA
862	13631	28302	3.99	1.0E-122	AF114486.1	NT	Homo sapiens Intersectin short isoform (ITSN) mRNA, complete cds
1198	13950	26614	4.28	1.0E-122	M20707.1	NT	Human kappa-immunoglobulin germline pseudogene (Chr22.4) variable region (subgroup V kappa II)
1683	14432	27128	1.28	1.0E-122	AF167703.1	NT	Homo sapiens cysteine-rich repeat-containing protein S62 precursor, mRNA, complete cds
1707	14450	27150	1.35	1.0E-122	11418424	NT	Homo sapiens collagen, type XII, alpha 1 (COL12A1), mRNA
1707	14450	27151	1.35	1.0E-122	11418424	NT	Homo sapiens collagen, type XII, alpha 1 (COL12A1), mRNA
1707	14450	27151	1.35	1.0E-122	11418424	NT	Homo sapiens collagen, type XII, alpha 1 (COL12A1), mRNA
1807	14547	27262	4.54	1.0E-122	BE908024.1	EST_HUMAN	601497032F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3866358 5'
2495	15212	27804	5.21	1.0E-122	BF316170.1	EST_HUMAN	601896173F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4125234 5'
2495	15212	27804	5.21	1.0E-122	BF316170.1	EST_HUMAN	601896173F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4125234 5'

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Table 4  
Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2844	15612	28280	1.41	1.0E-122	AF204717.1	NT	Homo sapiens FVE domain-containing dual specificity protein phosphatase FVE-DSP2 mRNA, complete cds
4796	17628	30148	5.04	1.0E-122	4502108	NT	Homo sapiens amyloid beta (A4) precursor protein (protease resistant), Alzheimer disease (APP), mRNA
4830	17658		1.46	1.0E-122	AW504045.1	EST_HUMAN	UHF-BN0-4-03-QJL1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3079948 5'
5476	18276	31170	1.36	1.0E-122	BE256030.1	EST_HUMAN	601113567F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3354232 5'
6658	18276	31170	7.1	1.0E-122	BE256030.1	EST_HUMAN	601113567F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3354232 5'
7113	19801	32866	0.73	1.0E-122	AA886871.1	EST_HUMAN	ak49H08.at Soares_Jessie_NHT Homo sapiens cDNA clone IMAGE:1409339 3'
8695	21387	34530	0.85	1.0E-122	AJ276801.1	NT	Homo sapiens mRNA for doublesex and mab-3 related transcription factor 1 (DMRT1)
8928	21617	34761	1.21	1.0E-122	11424216	NT	Homo sapiens lethal giant larvae (Drosophila) homolog 2 (LLGL2), mRNA
9223	21802	35073	1.19	1.0E-122	AJ358018.1	EST_HUMAN	q92H07.x1 NCI CGAP_Bm23 Homo sapiens cDNA clone IMAGE:2013757 3' similar to SW:MTA1_HUMAN Q13330 METASTASIS-ASSOCIATED PROTEIN MTA1.1
9223	21802	35074	1.19	1.0E-122	AJ358018.1	EST_HUMAN	q92H07.x1 NCI CGAP_Bm23 Homo sapiens cDNA clone IMAGE:2013757 3' similar to SW:MTA1_HUMAN Q13330 METASTASIS-ASSOCIATED PROTEIN MTA1.1
10034	22882	35699	1.05	1.0E-122	AL117234.1	NT	Novel human gene mapping to chromosome X, isoform of did (proto-oncogene)
10008	23898	36834	2.17	1.0E-122	AW955834.1	EST_HUMAN	EST367904 MAGE resequencing, MAGD Homo sapiens cDNA
11358	24046	37349	1.88	1.0E-122	AB024088.1	NT	Homo sapiens gene for B120, exon 10
11938	24508		6.8	1.0E-122	11418187	NT	Homo sapiens phosphatidylinositol-4-phosphate 5-kinase, type II (PIP5K2B), mRNA
751	13623	26181	1.74	1.0E-123	BF345274.1	EST_HUMAN	602018058F1 NCI CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4153670 5'
751	13623	26182	1.74	1.0E-123	BF345274.1	EST_HUMAN	602018058F1 NCI CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4153670 5'
892	13754	26415	5.4	1.0E-123	AL163249.2	NT	Homo sapiens chromosome 21 segment HS21C049
1001	13761	26422	2.5	1.0E-123	5803114	NT	Homo sapiens inner membrane protein, mitochondrial (mitofilin) (IMMT), mRNA
1216	13906	26634	5.58	1.0E-123	4505818	NT	Homo sapiens phosphatidylinositol-4-phosphate 5-kinase, type II, beta (PIP5K2B) mRNA, and translated products
1216	13906	26635	5.58	1.0E-123	4505818	NT	Homo sapiens phosphatidylinositol-4-phosphate 5-kinase, type II, beta (PIP5K2B) mRNA, and translated products
1438	14185	26871	0.91	1.0E-123	AJ388641.1	NT	Homo sapiens partial mRNA for immunoglobulin kappa chain variable region (IGVK gene), sample GN02
2092	14823	27555	2.7	1.0E-123	M55419.1	NT	Human amelogenin (AMELY) gene, 3' end of cds
2092	14823	27556	2.7	1.0E-123	M55419.1	NT	Human amelogenin (AMELY) gene, 3' end of cds
2092	14823	27557	2.7	1.0E-123	M55419.1	NT	Human amelogenin (AMELY) gene, 3' end of cds
2313	15038		9.62	1.0E-123	7705862	NT	Homo sapiens RAB9-like protein (LOC351209), mRNA
3245	16007	28657	0.95	1.0E-123	6612617	NT	Homo sapiens glutamyl-peptide cyclotransferase (glutamyl cyclase) (QPCT), mRNA
5361	18163	30847	1.56	1.0E-123	L34219.1	NT	Homo sapiens retinoid-binding protein (CRALBP) gene, complete cds

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5361	18163	30848	1.56	1.0E-123	L34219.1	NT	Homo sapiens retinaldehyde-binding protein (RALBP) gene, complete cds
5494	18293	31191	1.82	1.0E-123	BE798746.1	EST_HUMAN	601591108F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3945433 5'
6377	19148	32145	2.59	1.0E-123	AU118435.1	EST_HUMAN	AU118435 HEMBA1 Homo sapiens cDNA clone HEMBA1003591 5'
6905	19643	32688	1.2	1.0E-123	H63198.1	EST_HUMAN	Y84403.1 Soares fetal liver spleen 1NFS Homo sapiens cDNA clone IMAGE:202444 5' similar to SP:YAK1_YEAST P14680 PROTEIN KINASE YAK1;
6915	19652	32698	1.25	1.0E-123	U42224.1	NT	Human growth hormone releasing hormone gene, exon 7
7094	19783	32849	2.87	1.0E-123	U56268.1	NT	Human hBRAVOVONr-CAM precursor (hBRAVOVONr-CAM) gene, complete cds
7302	19885	33061	1.62	1.0E-123	11525833	NT	Homo sapiens heparan sulfate (glucosaminyl) 3-O-sulfotransferase 2 (HS3ST2), mRNA
7642	20212	33312	1.3	1.0E-123	11436439	NT	Homo sapiens 2'-5'-oligoadenylate synthetase 2 (OAS2), mRNA
7661	20221	33324	2.18	1.0E-123	BE263001.1	EST_HUMAN	601152815F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3608162 5'
7816	20511	33636	0.67	1.0E-123	AU131881.1	EST_HUMAN	AU131881 NT2RP3 Homo sapiens cDNA clone NT2RP3003409 5'
7816	20511	33637	0.67	1.0E-123	AU131881.1	EST_HUMAN	AU131881 NT2RP3 Homo sapiens cDNA clone NT2RP3003409 5'
8433	21126		1.13	1.0E-123	AW371924.1	EST_HUMAN	RC4-BT0311-261109-012-a07 BT0311 Homo sapiens cDNA
9289	22023	35193	2.43	1.0E-123	AB007823.1	NT	Homo sapiens mRNA for KIAA0454 protein, partial cds
9405	22067	35239	15.48	1.0E-123	U09823.1	NT	Oryctolagus cuniculus New Zealand white elongation factor 1 alpha (Rabef1e2) mRNA, complete cds
11720	24314	37637	4.96	1.0E-123	BF677292.1	EST_HUMAN	602086791F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4250879 5'
11720	24314	37638	4.96	1.0E-123	BF677292.1	EST_HUMAN	602086791F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4250879 5'
262	13070	25708	2.19	1.0E-124	4507600	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
262	13070	25709	2.19	1.0E-124	4507600	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
268	13076		2.90	1.0E-124	D87676.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
473	13289	25898	2.84	1.0E-124	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
675	13450	26092	2.68	1.0E-124	AA397551.1	EST_HUMAN	Z81B04.1 Stratagene echizo brain S11 Homo sapiens cDNA clone IMAGE:728719 5' similar to TR:G300482
675	13450	26093	2.68	1.0E-124	AA397551.1	EST_HUMAN	G300482 POL-REVERSE TRANSCRIPTASE HOMOLOG (RETROVIRAL ELEMENT);
742	13515	26174	7.84	1.0E-124	AF155654.1	NT	Z81B04.1 Stratagene echizo brain S11 Homo sapiens cDNA clone IMAGE:728719 5' similar to TR:G300482
790	13562	26223	1.61	1.0E-124	4507500	NT	G300482 POL-REVERSE TRANSCRIPTASE HOMOLOG (RETROVIRAL ELEMENT);
894	13663	26321	1.94	1.0E-124	7705446	NT	Z81B04.1 Stratagene echizo brain S11 Homo sapiens cDNA clone IMAGE:728719 5' similar to TR:G300482
1325	14074	26747	4.95	1.0E-124	AF274892.1	NT	Human putative ribosomal protein S1 mRNA
1325	14074	26748	4.95	1.0E-124	AF274892.1	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
1908	14648	27263	2.20	1.0E-124	AJ131712.1	NT	Homo sapiens hypofibrin protein (HSPC068), mRNA
2054	14786	27312	3.05	1.0E-124	BE798746.1	EST_HUMAN	Homo sapiens glucose transporter 3 gene, exons 9, 10, and complete cds
3358	16118	28774	0.85	1.0E-124	4504116	NT	Homo sapiens glucose transporter 3 gene, exons 9, 10, and complete cds
							Homo sapiens mRNA for nuclear RNA-helicase (nclH61 gene)
							601491715F1 NIH_MGC_98 Homo sapiens cDNA clone IMAGE:393954 5'
							Homo sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1) mRNA

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3482	16239	28896	1.25	1.0E-124	S78884.1	NT	Homo sapiens ATP-sensitive inwardly rectifying K-channel subunit (KCNJ8/BIR1) gene, exon
3482	16239	28896	1.26	1.0E-124	S78884.1	NT	Homo sapiens ATP-sensitive inwardly rectifying K-channel subunit (KCNJ8/BIR1) gene, exon
3840	16393	28033	1.54	1.0E-124	X13794.1	NT	H. sapiens lactate dehydrogenase B gene exon 1 and 2 (EC 1.1.1.27) (and joined CDS)
3880	16630	28289	1	1.0E-124	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
4056	16801	28432	1.34	1.0E-124	4504116	NT	Homo sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1) mRNA
4896	17430	30061	1.94	1.0E-124	AB024069.1	NT	Homo sapiens gene for B120, exon 11
4881	17608		1.13	1.0E-124	M18178.1	NT	Human fibronectin gene extra type III repeat (EDII), exon x+1
5215	18023	30847	12.12	1.0E-124	8922337	NT	Homo sapiens hypothetical protein FLJ10300 (FLJ10300), mRNA
5596	18383	31293	0.92	1.0E-124	4508786	NT	Homo sapiens IQ motif containing GTPase activating protein 1 (IQGAP1) mRNA
5797	18598	31514	6.94	1.0E-124	BF696135.1	EST_HUMAN	602124644F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4281635 5'
6077	18856	31823	0.91	1.0E-124	AV711263.1	EST_HUMAN	AV711263 Cu Homo sapiens cDNA clone CUAADF07 5'
6339	19109	32098	0.98	1.0E-124	11420654	NT	Homo sapiens ubiquitin specific protease 9, X chromosome (Drosophila fat facets related) (USP9X), mRNA
6912	19849	32865	2.95	1.0E-124	Y11717.1	NT	M. musculus mRNA for hox3 gene
7037	19728	32788	0.94	1.0E-124	BE271295.1	EST_HUMAN	600943771F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:2869585 5'
7037	19728	32787	0.94	1.0E-124	BE271295.1	EST_HUMAN	600943771F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:2869585 5'
7452	20128	33220	0.92	1.0E-124	AA630331.1	EST_HUMAN	ec08105.a1 Sratogene HeLa cell e3 037216 Homo sapiens cDNA clone IMAGE:855897 3'
8156	20850	33982	8.07	1.0E-124	4508054	NT	Homo sapiens ribosomal protein L5 (RPL5) mRNA
8362	21055	34195	1.28	1.0E-124	AW612106.1	EST_HUMAN	hg94409.x1 NCI_CGAP_Kd11 Homo sapiens cDNA clone IMAGE:2863240 3' similar to TR:085162
8362	21055	34196	1.28	1.0E-124	AW612106.1	EST_HUMAN	O65162 PEROXISOMAL SHORT-CHAIN ALCOHOL DEHYDROGENASE ;
9060	21749	34907	0.61	1.0E-124	AI798984.1	EST_HUMAN	hg94409.x1 NCI_CGAP_Kd11 Homo sapiens cDNA clone IMAGE:2863240 3' similar to TR:085162
9060	21749	34908	0.61	1.0E-124	AI798984.1	EST_HUMAN	O65162 PEROXISOMAL SHORT-CHAIN ALCOHOL DEHYDROGENASE ;
9390	22052	35223	2.31	1.0E-124	AV645633.1	EST_HUMAN	wc43g03.x1 NCI_CGAP_P728 Homo sapiens cDNA clone IMAGE:2321428 3'
9390	22052	35224	2.31	1.0E-124	AV645633.1	EST_HUMAN	wc43g03.x1 NCI_CGAP_P728 Homo sapiens cDNA clone IMAGE:2321428 3'
9477	22130	35309	0.62	1.0E-124	AF022855.1	NT	AV645633 GLC Homo sapiens cDNA clone GLCACE04 3'
9477	22130	35310	0.52	1.0E-124	AF022855.1	NT	AV645633 GLC Homo sapiens cDNA clone GLCACE04 3'
9508	22161	35342	7.57	1.0E-124	AI767133.1	EST_HUMAN	Homo sapiens cep250 centrosome associated protein mRNA, complete cds
9508	22161	35343	7.57	1.0E-124	AI767133.1	EST_HUMAN	Homo sapiens cep250 centrosome associated protein mRNA, complete cds
9771	22422	35630	1.57	1.0E-124	AW503755.1	EST_HUMAN	w63302.x1 NCI_CGAP_Kd12 Homo sapiens cDNA clone IMAGE:2400691 3'
10804	23487		1.44	1.0E-124	11432087	NT	w63302.x1 NCI_CGAP_Kd12 Homo sapiens cDNA clone IMAGE:2400691 3'
10976	23652	36905	1.81	1.0E-124	U94778.1	NT	UIH-F-BNO-elz-b-04-0-J1.1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3078846 5'
11305	23964	37265	3.51	1.0E-124	AW665663.1	EST_HUMAN	Homo sapiens leucine-rich, glioma inactivated 1 (LGI1), mRNA
							Human muscle glycogen phosphorylase (PYGM) gene, exons 6 through 17
							h056008.x1 Soares_NFL_T_G8C_31 Homo sapiens cDNA clone IMAGE:2980906 3'

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11452	23219	38452	3	1.0E-124	AI446455.1	EST_HUMAN	Y1903.x1 NCL_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2141980 3' similar to TR:O31662 O31662 YKRS PROTEIN.;
11462	23219	38463	3	1.0E-124	AI446455.1	EST_HUMAN	Y1903.x1 NCL_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2141980 3' similar to TR:O31662 O31662 YKRS PROTEIN.;
12029	13450	28082	4.1	1.0E-124	AA397551.1	EST_HUMAN	ZB1504.r1 Stratiogene schizo brain S11 Homo sapiens cDNA clone IMAGE:728719 5' similar to TR:G300482 G300482 POL-REVERSE TRANSCRIPTASE HOMOLOG (RETROVIRAL ELEMENT);
12029	13450	28083	4.1	1.0E-124	AA397551.1	EST_HUMAN	ZB1504.r1 Stratiogene schizo brain S11 Homo sapiens cDNA clone IMAGE:728719 5' similar to TR:G300482 G300482 POL-REVERSE TRANSCRIPTASE HOMOLOG (RETROVIRAL ELEMENT);
12454	24823	31028	1.61	1.0E-124	AB028016.1	NT	Homo sapiens mRNA for KIAA1093 protein, partial cds
12708	25279	30729	1.44	1.0E-124	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
12708	25279	30730	1.44	1.0E-124	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
148	12961	25603	1.74	1.0E-125	BE219510.1	EST_HUMAN	Y5808.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3177686 3' similar to TR:Q25058 Q25058 FIBROPELIN IA;
148	12961	25604	1.74	1.0E-125	BE219510.1	EST_HUMAN	Y5808.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3177686 3' similar to TR:Q25058 Q25058 FIBROPELIN IA;
311	13115		5.49	1.0E-125	AB032988.1	NT	Homo sapiens mRNA for KIAA1172 protein, partial cds
417	12828	25441	5.47	1.0E-125	BE743922.1	EST_HUMAN	60157781F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3928695 5'
629	13408	26043	1.18	1.0E-125	AI110656.1	EST_HUMAN	HA0086 Human fetal liver cDNA library Homo sapiens cDNA
629	13408	26044	1.18	1.0E-125	AI110656.1	EST_HUMAN	HA0086 Human fetal liver cDNA library Homo sapiens cDNA
711	13485	26134	1.56	1.0E-125	AF264760.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
840	13610	26280	2.29	1.0E-125	AA042813.1	EST_HUMAN	Z453.c07 s1 Soares_pregnant_uterus_NibHPU Homo sapiens cDNA clone IMAGE:486540 3' similar to gb:X05857_cds1 OLFACTORY RECEPTOR-LIKE PROTEIN HGMPO7E (HUMAN);
978	13743	26405	1.22	1.0E-125	AL183210.2	NT	Homo sapiens chromosome 21 segment HS21C010
1131	13887	26545	1.78	1.0E-125	7662279	NT	Homo sapiens KIAA0744 gene product; histone deacetylase 7 (KIAA0744), mRNA
1668	15575	27105	0.89	1.0E-125	7661867	NT	Homo sapiens KIAA0022 gene product (KIAA0022), mRNA
1793	14533	27242	0.91	1.0E-125	U78027.1	NT	Homo sapiens Bruton's tyrosine kinase (BTK), alpha-D-galactosidase A (GLA), L44-like ribosomal protein (L44L) and FTP3 (FTP3) genes, complete cds
1804	14544	27258	1.59	1.0E-125	AF015450.1	NT	Homo sapiens Usurpin-alpha mRNA, complete cds
1804	14544	27259	1.59	1.0E-125	AF015450.1	NT	Homo sapiens Usurpin-alpha mRNA, complete cds
2358	15080	27816	1.68	1.0E-125	AA011278.1	EST_HUMAN	Z01609.r1 Soares_fetal_liver_aplees_1NFLS_S1 Homo sapiens cDNA clone IMAGE:429568 5'
2608	15225	27967	0.89	1.0E-125	AA042813.1	EST_HUMAN	Z453.c07 s1 Soares_pregnant_uterus_NibHPU Homo sapiens cDNA clone IMAGE:486540 3' similar to gb:X05857_cds1 OLFACTORY RECEPTOR-LIKE PROTEIN HGMPO7E (HUMAN);
2604	15317	28057	1.3	1.0E-125	4504698	NT	Homo sapiens inhibin, alpha (INH) mRNA
2604	15317	28058	1.3	1.0E-125	4504698	NT	Homo sapiens inhibin, alpha (INH) mRNA

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Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3009	17874	28425	0.94	1.0E-125	BE018009.1	EST_HUMAN	b67406.y1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3048131 5' similar to TR:Q85604 Q85604 ZINC FINGER PROTEIN.;
3839	16590	28228	0.92	1.0E-125	AA042813.1	EST_HUMAN	2653c07.s1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:486540 3' similar to gb:V05957_cds1 OLFACTORY RECEPTOR-LIKE PROTEIN HGMP07E (HUMAN);
4513	17248	29883	2.09	1.0E-125	11425114	NT	Homo sapiens zinc finger protein ZNF287 (ZNF287), mRNA
4513	17248	29884	2.09	1.0E-125	11425114	NT	Homo sapiens zinc finger protein ZNF287 (ZNF287), mRNA
4971	12961	25603	1.48	1.0E-125	BE219510.1	EST_HUMAN	h939a08.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3177688 3' similar to TR:Q25058 Q25058 FIBROPELLIN IA;
4971	12961	25604	1.48	1.0E-125	BE219510.1	EST_HUMAN	h939a08.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3177688 3' similar to TR:Q25058 Q25058 FIBROPELLIN IA;
5783	18574	31503	3.16	1.0E-125	11439448	NT	Homo sapiens KIAA0985 protein (KIAA0985), mRNA
5802	18592	31517	0.91	1.0E-125	BE175169.1	EST_HUMAN	QV2-HT0577-010500-165-506 HT0577 Homo sapiens cDNA
5842	18630	31565	3.76	1.0E-125	BE892860.1	EST_HUMAN	601433472F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3918932 5'
5884	18670	31811	0.74	1.0E-125	AI679004.1	EST_HUMAN	tu67c07.x1 NCI_CGAP_Geas4 Homo sapiens cDNA clone IMAGE:2258108 3' similar to WP:Q45G9.2
6188	18995	31938	0.8	1.0E-125	BE739056.1	EST_HUMAN	CE01854;
6486	19253	32253	1.63	1.0E-125	BE562526.1	EST_HUMAN	601305670F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3640097 5'
6486	19253	32254	1.53	1.0E-125	BE562526.1	EST_HUMAN	601335826F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3689790 5'
6961	19443	32469	5.28	1.0E-125	X03427.1	NT	601335826F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3689790 5'
6961	19443	32460	5.28	1.0E-125	X03427.1	NT	Homo sapiens IGF-II gene, exon 5
7706	20370	33483	0.55	1.0E-125	BE515100.1	EST_HUMAN	Homo sapiens IGF-II gene, exon 5
8444	21136	34273	0.99	1.0E-125	U90288.1	NT	601236163F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3608084 5'
8444	21136	34274	0.99	1.0E-125	U90288.1	NT	Human chromosome 10 duplicated adrenoleukodystrophy (ALD) gene segment containing exons 8-10
9016	21706	34856	6.83	1.0E-125	BE181640.1	EST_HUMAN	Human chromosome 10 duplicated adrenoleukodystrophy (ALD) gene segment containing exons 8-10
9016	21706	34857	6.83	1.0E-125	BE181640.1	EST_HUMAN	QV1-HT0638-070500-191-d12 HT0638 Homo sapiens cDNA
9281	22035	36207	0.96	1.0E-125	AI555998.1	EST_HUMAN	QV1-HT0638-070500-191-d12 HT0638 Homo sapiens cDNA
10350	22997	36215	0.83	1.0E-125	BE794578.1	EST_HUMAN	h52b03.x1 NCI_CGAP_Kid1 Homo sapiens cDNA clone IMAGE:2171981 3' similar to TR:Q14069 Q14069 HYPOTHETICAL PROTEIN;
10391	23037	36253	1.06	1.0E-125	AB002298.1	NT	601590346F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3944531 5'
10581	23278	36514	3.23	1.0E-125	AF043458.1	NT	Human mRNA for KIAA0300 gene, partial cds
10758	23443	36688	1.61	1.0E-125	11425570	NT	Homo sapiens I-REL gene, exon 6
11081	23751	37026	3.94	1.0E-125	AB014567.1	NT	Homo sapiens gamma-globin receptor 1 (skeletal) (RYR1), mRNA

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11269	23921	37213	1.74	1.0E-126	7689505	NT	Homo sapiens myosin, heavy polypeptide 1, skeletal muscle, adult (MYH1), mRNA
11269	23921	37213	1.74	1.0E-126	AF028029.1	NT	Homo sapiens poly(A) binding protein II (PABP2) gene, complete cds
11269	23927	37218	4.84	1.0E-126	AF028029.1	EST_HUMAN	RCS-ST0165-250200-018-cl1 ST0168 Homo sapiens cDNA
11371	23984	37284	1.92	1.0E-126	AW812898.1	EST_HUMAN	QV3-BT0569-020200-075-g08 BT0569 Homo sapiens cDNA
11496	24087	37397	3.58	1.0E-126	BE074287.1	EST_HUMAN	QV3-BT0569-020200-075-g09 BT0569 Homo sapiens cDNA
11496	24087	37398	3.58	1.0E-126	BE074287.1	EST_HUMAN	Homo sapiens CDC-like kinase (CLK) mRNA
11496	24087	37398	3.58	1.0E-126	4758007	NT	H. sapiens gene for alpha1-antichymotrypsin, exon 3
757	13529	26188	1.49	1.0E-126	X68735.1	NT	Homo sapiens hypothetical protein FLJ20048 (FLJ20048), mRNA
899	13667	26331	1.45	1.0E-126	X68735.1	NT	Homo sapiens hypothetical protein FLJ20048 (FLJ20048), mRNA
2344	15087	27804	1.17	1.0E-126	8623056	NT	Homo sapiens hypothetical protein FLJ20048 (FLJ20048), mRNA
2344	15087	27805	1.17	1.0E-126	8623056	NT	Homo sapiens RAN binding protein 2 (RANBP2), mRNA
2805	16318	28059	1.48	1.0E-126	6382078	NT	Homo sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1) mRNA
3069	15835	3069	0.72	1.0E-126	4504116	NT	Homo sapiens pancreas (#637208) Homo sapiens cDNA clone IMAGE:582420 5'
3070	15836	28479	7.54	1.0E-126	AA160709.1	EST_HUMAN	z072c03.r1 Stratagene pancreas (#637208) Homo sapiens cDNA clone IMAGE:582420 5'
3070	15836	28480	7.54	1.0E-126	AA160709.1	EST_HUMAN	z072c03.r1 Stratagene pancreas (#637208) Homo sapiens cDNA clone IMAGE:582420 5'
3620	16373	28014	1.09	1.0E-126	X39441.1	NT	H. sapiens DNA for liver cytochrome b5 pseudogene
3647	16400	29040	1.6	1.0E-126	7667038	EST	Homo sapiens death receptor 6 (DR6), mRNA
4783	17515	30137	1.74	1.0E-126	N34078.1	EST_HUMAN	yk78c06.l1 Soares melanocyte ZnfxHM Homo sapiens cDNA clone IMAGE:267850 5'
5078	17797	30413	0.81	1.0E-126	BE743922.1	EST_HUMAN	601677981.F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3926885 5'
5616	18412	31325	0.68	1.0E-126	T06886.1	EST_HUMAN	y552b12.s1 Soares fetal liver spleen 1N1LS Homo sapiens cDNA clone IMAGE:06527 3'
6139	18917	31887	3.22	1.0E-126	AA460075.1	EST_HUMAN	z068e03.r1 Soares total fetus Nb2IFB_9w Homo sapiens cDNA clone IMAGE:780444 5' similar to TR:G1148880 G1146890 TITIN;
6197	18973	31949	4.2	1.0E-126	AB040658.1	NT	Homo sapiens mRNA for KIAA1525 protein, partial cds
6197	18973	31950	4.2	1.0E-126	AB040658.1	NT	Homo sapiens mRNA for KIAA1525 protein, partial cds
7399	20077	33157	1.02	1.0E-126	AF257737.1	NT	Homo sapiens ciliary dynein heavy chain 9 (DNAH9) mRNA, complete cds
7399	20077	33158	1.02	1.0E-126	AF257737.1	NT	Homo sapiens ciliary dynein heavy chain 9 (DNAH9) mRNA, complete cds
7602	20269	33375	0.62	1.0E-126	AU136463.1	EST_HUMAN	AU136463 PLAGE1 Homo sapiens cDNA clone PLACE1004325 5'
7655	20319	33426	0.69	1.0E-126	AB06483.1	EST_HUMAN	wf0801.x1 Soares NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2350009 3' similar to SW:AFP22_HUMAN Q14108 MAGUK P65 SUBFAMILY MEMBER 2;
7778	20473	33568	0.76	1.0E-126	AB037715.1	NT	Homo sapiens mRNA for KIAA1294 protein, partial cds
7778	20473	33567	0.76	1.0E-126	AB037715.1	NT	Homo sapiens mRNA for KIAA1294 protein, partial cds
7887	20682	33711	2.55	1.0E-126	X16809.1	NT	Human mRNA for arylgln (variant 2.1)
8083	20777	33907	0.99	1.0E-126	AA483368.1	EST_HUMAN	ne74b12.s1 NCI_CGAP_Ew1 Homo sapiens cDNA clone IMAGE:308963 similar to SW:TSG8_HUMAN
9695	22546	35539	0.87	1.0E-126	4505424	NT	P08066 TUMOR NECROSIS FACTOR-INDUCIBLE PROTEIN TSG-6 PRECURSOR;
							Homo sapiens neuro-oncological ventral antigen 1 (NOVA1), splice variant 1, mRNA

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10683	23384	36824	1.27	1.0E-126	M83196.1	NT	Human macrophage mannose receptor (MRC1) gene, exon 5
10766	23450	36882	2.36	1.0E-126	BF683175.1	EST_HUMAN	602139138F1 NIH_MGC_46 Homo sapiens cDNA clone IMAGE:4298240 5'
11501	24102	37414	5.47	1.0E-126	BE261680.1	EST_HUMAN	601149404F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3502129 5'
12480	17797	30413	7.17	1.0E-126	BE743922.1	EST_HUMAN	601577981F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3926685 5'
168	12982	25822	4.63	1.0E-127	AB024597.1	NT	Homo sapiens mRNA for casein kinase I epsilon, complete cds
168	12982	25822	4.63	1.0E-127	AB024597.1	NT	Homo sapiens mRNA for casein kinase I epsilon, complete cds
169	12982	25822	4.71	1.0E-127	AB024597.1	NT	Homo sapiens mRNA for casein kinase I epsilon, complete cds
169	12982	25823	4.71	1.0E-127	AB024597.1	NT	Homo sapiens mRNA for casein kinase I epsilon, complete cds
267	13075	25716	3.54	1.0E-127	D87676.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
267	13075	25717	3.54	1.0E-127	D87676.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
861	13630	26301	2.03	1.0E-127	AF114488.1	NT	Homo sapiens Intersectin short isoform (ITSN) mRNA, complete cds
868	13694	26330	1.37	1.0E-127	U72621.2	NT	Homo sapiens lost on transformation LOT1 mRNA, complete cds
1688	14430	27128	1.08	1.0E-127	4827053	NT	Homo sapiens ubiquitin specific protease 8 (USP8) mRNA
2058	14790	27515	2.44	1.0E-127	5803065	NT	Homo sapiens leukocyte immunoglobulin-like receptor, subfamily A (with TM domain), member 1 (LILRA1), mRNA
2058	14790	27516	2.44	1.0E-127	5803065	NT	Homo sapiens leukocyte immunoglobulin-like receptor, subfamily A (with TM domain), member 1 (LILRA1), mRNA
2197	14928	27661	6.02	1.0E-127	4506820	NT	Homo sapiens ribosomal protein L28 (RPL28) mRNA
2341	15084	27801	2.73	1.0E-127	AF245506.1	NT	Homo sapiens edlican mRNA, complete cds
2614	15325	28088	3.04	1.0E-127	X12881.1	NT	Human mRNA for cyclokeratin 18
2626	15338	28081	1.1	1.0E-127	AA450131.1	EST_HUMAN	z42a02.r1 Scores_total_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:789098 5'
2626	15338	28082	1.1	1.0E-127	AA450131.1	EST_HUMAN	z42a02.r1 Scores_total_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:789098 5'
							au80e06.y1 Schnelder fetal brain 00004 Homo sapiens cDNA clone IMAGE:2782694 5' similar to TR:Q15170 Q15170 TRANSCRIPTION FACTOR S-II-RELATED PROTEIN, contains element MER22 repetitive element;
3701	16543	29178	1.21	1.0E-127	AW161297.1	EST_HUMAN	Homo sapiens delayed rectifier potassium channel subunit 1aK mRNA, complete cds
4098	16838	29465	0.7	1.0E-127	AF135188.1	NT	Homo sapiens neuroblastoma-amplified protein (LOC51594), mRNA
4227	16868	29592	23.74	1.0E-127	7706239	NT	Homo sapiens neuroblastoma-amplified protein (LOC51594), mRNA
4227	16868	29593	23.74	1.0E-127	7706239	NT	Homo sapiens neuroblastoma-amplified protein (LOC51594), mRNA
4462	17198	29824	0.94	1.0E-127	AF252297.1	NT	Homo sapiens cytochrome P450 retinoid metabolizing protein P450RAI-2 mRNA, complete cds
4504	17289	29926	4.35	1.0E-127	4506384	NT	Homo sapiens RAD1 (S. pombe) homolog (RAD1) mRNA, and translated products
4500	17325		1.92	1.0E-127	AL163268.2	NT	Homo sapiens chromosome 21 segment HS21C068
4625	17360	29983	1.28	1.0E-127	6812639	NT	Homo sapiens Rbg1 and YY1 binding protein (RYBP), mRNA



Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5620	18416	31329	1.37	1.0E-127	W03547.1	EST_HUMAN	z01a10.1 Soares melanocyte 2NBM Homo sapiens cDNA clone IMAGE:291258 5' similar to SW:PIP6_RAT P10888 1-PHOSPHATIDYLINOSITOL-4,6-BISPHOSPHATE PHOSPHODIESTERASE DELTA 1;
5650	18445	31359	2.4	1.0E-127	4826863	NT	Homo sapiens neuronal cell adhesion molecule (NRCAM) mRNA
5713	18506	31428	4.25	1.0E-127	X85794.1	NT	H. sapiens NOS2 gene, exon 6
6070	18849	31813	2.17	1.0E-127	X84080.1	NT	H. sapiens TCF11 gene, exon 3-6
6228	19003	31978	5.28	1.0E-127	4504778	NT	Homo sapiens Integrin, beta 8 (ITGB8) mRNA
6660	19326	32332	0.89	1.0E-127	11421595	NT	Homo sapiens Immunoglobulin superfamily, member 3 (IGSF3), mRNA
6862	19444	32461	0.81	1.0E-127	4826977	NT	Homo sapiens reelin (RELN) mRNA
7684	20348	33491	1.65	1.0E-127	11421914	NT	Homo sapiens Pendred syndrome (PDS), mRNA
7684	20348	33462	1.65	1.0E-127	11421914	NT	Homo sapiens Pendred syndrome (PDS), mRNA
7691	20355	33470	0.84	1.0E-127	AW906292.1	EST_HUMAN	QV3-BN0046-150300-121-111 BN0046 Homo sapiens cDNA
8785	21477	34625	0.8	1.0E-127	11427235	NT	Homo sapiens Chediak-Higashi syndrome 1 (CHS1), mRNA
8785	21477	34628	0.8	1.0E-127	11427235	NT	Homo sapiens Chediak-Higashi syndrome 1 (CHS1), mRNA
9540	22193	35377	4.17	1.0E-127	AF274863.1	NT	Homo sapiens secretory pathway component Sec31B-1 mRNA, alternatively spliced, complete cds
9540	22193	35378	4.17	1.0E-127	AF274863.1	NT	Homo sapiens secretory pathway component Sec31B-1 mRNA, alternatively spliced, complete cds
9773	22424	35631	1	1.0E-127	AI298932.1	EST_HUMAN	qmr6409.x1 NCJ_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1896449 3'
10241	22869	36101	1.34	1.0E-127	11427235	NT	Homo sapiens Chediak-Higashi syndrome 1 (CHS1), mRNA
11107	23777	37060	7.88	1.0E-127	11417339	NT	Homo sapiens similar to heat shock 70kD protein 88 (mortalin-2) (H. sapiens) (LOC83184), mRNA
11107	23777	37051	7.88	1.0E-127	11417339	NT	Homo sapiens similar to heat shock 70kD protein 88 (mortalin-2) (H. sapiens) (LOC83184), mRNA
11627	24224	37548	3.25	1.0E-127	BE895415.1	EST_HUMAN	601434784F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3919817 5'
11627	24224	37547	3.25	1.0E-127	BE895415.1	EST_HUMAN	601434784F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3919817 5'
12244	12962	25622	2.25	1.0E-127	AB024597.1	NT	Homo sapiens mRNA for casein kinase I epsilon, complete cds
12244	12962	25623	2.25	1.0E-127	AB024597.1	NT	Homo sapiens mRNA for casein kinase I epsilon, complete cds
12444	24814	31048	2.88	1.0E-127	AB0711399.1	NT	Homo sapiens gene for AF-9, complete cds
447	13233	25873	3.04	1.0E-128	BE385617.1	EST_HUMAN	601278127F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3618622 5'
2063	14795	27520	5.5	1.0E-128	U02523.1	NT	Human FAU1P pseudogene, trinucleotide repeat regions
2063	14795	27521	5.5	1.0E-128	U02523.1	NT	Human FAU1P pseudogene, trinucleotide repeat regions
2206	14834	27672	8.76	1.0E-128	4506718	NT	Homo sapiens ribosomal protein S2 (RPS2) mRNA
2446	15185		1.1	1.0E-128	11437455	NT	Homo sapiens chromatin-specific transcription elongation factor, 140 kDa subunit (FACTP140), mRNA
3398	16148	28802	1.06	1.0E-128	AB033073.1	NT	Homo sapiens mRNA for KIAA1247 protein, partial cds

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## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4616	17351	20986	6.14	1.0E-128	11428673	NT	Homo sapiens prospero-related homeobox 1 (PROX1), mRNA
5458	18257	31147	0.7	1.0E-128	X69539.1	NT	H sapiens gene for inter-alpha-trypsin inhibitor heavy chain H1, exon 12
5888	18672	31613	0.65	1.0E-128	BE747881.1	EST_HUMAN	601580466F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3928057 5'
5888	18672	31614	0.65	1.0E-128	BE747881.1	EST_HUMAN	601580466F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3928057 5'
6324	19084	32082	2.58	1.0E-128	11420865	NT	Homo sapiens phosphodiesterase 1C, calmodulin-dependent (70kD) (PDE1C), mRNA
6831	19493	32516	6.9	1.0E-128	BF224345.1	EST_HUMAN	7g86b10.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3'
7327	20010	33089	0.62	1.0E-128	BE614105.1	EST_HUMAN	601503846F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3905784 5'
7682	20356	33471	0.67	1.0E-128	11546923	NT	Homo sapiens putative ABC transporter (WHITE2), mRNA
8448	21138	34276	0.73	1.0E-128	AB007923.1	NT	Homo sapiens mRNA for KIAA0454 protein, partial cds
8448	21138	34277	0.73	1.0E-128	AB007923.1	NT	Homo sapiens mRNA for KIAA0454 protein, partial cds
10037	22685	35903	1.63	1.0E-128	AA639198.1	EST_HUMAN	ms04a11.1 NCL_CGAP_Ew1 Homo sapiens cDNA clone IMAGE:1182820 similar to TRG851338 G851338
10608	23302	36541	3.52	1.0E-128	11425284	NT	CHROMOSOME SEGREGATION GENE HOMOLOG CAS. ;
10618	23311	36550	3.21	1.0E-128	AA928859.1	EST_HUMAN	Homo sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 2D (GRIN2D), mRNA
10690	23390	36628	1.35	1.0E-128	AJ252090.1	NT	DEPENDENT KINASES REGULATORY SUBUNIT 1 (HUMAN);
10761	23445	36689	1.4	1.0E-128	BE384475.1	EST_HUMAN	Homo sapiens mRNA for TRABID protein (TRABID gene)
12117	24610	26839	7.02	1.0E-129	AW955290.1	EST_HUMAN	60127826F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3618750 5'
118	13180	26839	1.33	1.0E-129	S37722.1	NT	EST367360 MAGE resequences, MAGC Homo sapiens cDNA
404	13189	26839	1.19	1.0E-129	S37722.1	NT	Insulin-like growth factor binding protein-2 [human, placenta, Genomic, 1019 nt, segment 2 of 4]
1713	14458	27154	2.73	1.0E-129	AL096880.1	NT	Insulin-like growth factor binding protein-2 [human, placenta, Genomic, 1019 nt, segment 2 of 4]
1717	14460	27158	1.57	1.0E-129	AF240786.1	NT	Novel human mRNA containing Zinc finger C2H2 type domains
1717	14460	27158	1.57	1.0E-129	AF240786.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1)
1838	14578	27289	2.76	1.0E-129	AF240786.1	NT	genes, complete cds
3125	15890	28531	1.21	1.0E-128	Q14585	SWISSPROT	Homo sapiens zinc finger protein 76 (expressed in testis) (ZNF76), mRNA
3125	15890	28532	1.21	1.0E-128	Q14585	SWISSPROT	ZINC FINGER PROTEIN HZF10
3125	15890	28533	1.21	1.0E-128	Q14585	SWISSPROT	ZINC FINGER PROTEIN HZF10
4143	16885	29516	1.94	1.0E-128	AB040892.1	NT	ZINC FINGER PROTEIN HZF10
4247	16888	29611	2.26	1.0E-128	AW755254.1	EST_HUMAN	Homo sapiens mRNA for KIAA1459 protein, partial cds
4247	16888	29612	2.26	1.0E-128	AW755254.1	EST_HUMAN	CMYA5 Human cardiac muscle expression library Homo sapiens cDNA clone 4151835 similar to CMYA5
4247	16888	29612	2.26	1.0E-128	AW755254.1	EST_HUMAN	Cardiomyopathy associated gene 5
4247	16888	29612	2.26	1.0E-128	AW755254.1	EST_HUMAN	CMYA5 Human cardiac muscle expression library Homo sapiens cDNA clone 4151835 similar to CMYA5
4247	16888	29612	2.26	1.0E-128	AW755254.1	EST_HUMAN	Cardiomyopathy associated gene 5

### Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6000	18781	31742	3.73	1.0E-129	AJ008345.1	NT	Homo sapiens KVLQT1 gene
6816	19477	32499	0.58	1.0E-128	BE869993.1	EST_HUMAN	601449740F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3853888 5'
6816	19477	32500	0.58	1.0E-129	BE869993.1	EST_HUMAN	601449740F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3853888 5'
7027	18719	32778	4.15	1.0E-129	AJ008345.1	NT	Homo sapiens KVLQT1 gene
7090	19779	32844	3.93	1.0E-129	11420850	NT	Homo sapiens similar to ribosomal protein S26 (H. sapiens) (LOC63694), mRNA
7428	20105	33191	2.49	1.0E-128	AF041056.1	NT	Homo sapiens WSCR4 gene, exons 3 and 4
7428	20105	33192	2.49	1.0E-129	AF041056.1	NT	Homo sapiens WSCR4 gene, exons 3 and 4
8217	20911		3.94	1.0E-129	AB014534.1	NT	Homo sapiens mRNA for KIAA0634 protein, partial cds
9979	22827	35835	0.97	1.0E-129	11437282	NT	Homo sapiens solute carrier family 21 (organic anion transporter), member 9 (SLC21A9), mRNA
9979	22827	35836	0.97	1.0E-129	11437282	NT	Homo sapiens solute carrier family 21 (organic anion transporter), member 9 (SLC21A9), mRNA
10523	23169	36396	0.57	1.0E-129	AA682200.1	EST_HUMAN	Homo sapiens solute carrier family 21 (organic anion transporter), member 9 (SLC21A9), mRNA
11186	23851	37137	4	1.0E-128	AA625526.1	EST_HUMAN	af2707.r1 Soares NIH-MPUs S1 Homo sapiens cDNA clone IMAGE:1047689 5'
11289	19779	32844	6.57	1.0E-129	11420850	NT	Homo sapiens similar to ribosomal protein S28 (H. sapiens) (LOC63694), mRNA
11615	24213	37637	1.38	1.0E-129	AU143115	EST_HUMAN	AU143115 Y79AA1 Homo sapiens cDNA clone Y79AA1001410 5'
11615	24213	37538	1.38	1.0E-129	AU143115	EST_HUMAN	AU143115 Y79AA1 Homo sapiens cDNA clone Y79AA1001410 5'
			1.79	1.0E-129	H83155.1	EST_HUMAN	Y49C05.r1 Soares fetal liver spleen INFLS Homo sapiens cDNA clone IMAGE:199112 5' similar to SP-B48150 B48150 HP-25-HIBERNATION-RELATED PROTEIN - TAMIAS ASIATICUS=ASIAN ;
12104	24001		2.86	1.0E-129	AL120739.1	EST_HUMAN	DKFZp762K171_r1 702 (synonym: hmel2) Homo sapiens cDNA clone DKFZp762K171 5'
12483	24842		1.3	1.0E-130	77055530	NT	Homo sapiens hypothetical protein (HSPC242), mRNA
74	12901	25538	0.69	1.0E-130	AB037835.1	NT	Homo sapiens mRNA for KIAA1414 protein, partial cds
1147	13902	26664	11.38	1.0E-130	BE276192.1	EST_HUMAN	60112195F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3346398 5'
1681	14407	27098	11.38	1.0E-130	BE276192.1	EST_HUMAN	60112196F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3346398 5'
1681	14407	27099	3.08	1.0E-130	X04092.1	NT	Human gene for cathepsin (EC 1.11.1.9) exon 9 mapping to chromosome 11, band p13
1978	14712		5.37	1.0E-130	AJ010230.1	NT	Homo sapiens RET finger protein-like 1 antisense transcript, partial
2773	15478	28280	1.17	1.0E-130	BE564219.1	EST_HUMAN	601343016F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3685466 5'
2881	15648	28291	1.17	1.0E-130	BE564219.1	EST_HUMAN	601343016F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3685466 5'
2881	15648	28291	1.09	1.0E-130	AF240988.1	NT	Homo sapiens retinol dehydrogenase homolog isoform-1 (RDH1) mRNA, complete cds
3565	16320	28968	5.38	1.0E-130	BE564219.1	EST_HUMAN	601343016F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3685466 5'
3750	15648	28280	5.36	1.0E-130	BE564219.1	EST_HUMAN	601343016F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3685466 5'
3780	18048	28291	1.92	1.0E-130	AW503580.1	EST_HUMAN	UHF-BNO-alky-g-08-0-UJ.r1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3078731 5'
3915	16863	29305	1.5	1.0E-130	M97710.1	NT	Human T-cell receptor (V alpha 22.1, J alpha RPLM4295-variant, C alpha 1) mRNA
4053	16798	29429	0.78	1.0E-130	AW843993.1	EST_HUMAN	CM4-CN0045-180200-511-402 CN0045 Homo sapiens cDNA
4501	17237	29869	1.07	1.0E-130	AW363299.1	EST_HUMAN	RC0-C10318-201198-031-11 CT0318 Homo sapiens cDNA
5038	17757	30371	1.07	1.0E-130	AW363299.1	EST_HUMAN	RC0-C10318-201198-031-11 CT0318 Homo sapiens cDNA
5038	17757	30372	1.07	1.0E-130	AW363299.1	EST_HUMAN	RC0-C10318-201198-031-11 CT0318 Homo sapiens cDNA

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Table 4  
Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6628	19391	32405	0.55	1.0E-130	X57825.1	NT	Human germline immunoglobulin lambda light chain pseudogene (VIL1)
6723	19557	32587	0.61	1.0E-130	AW843875.1	EST_HUMAN	CMO-CH0045-170200-225-g03 CH0045 Homo sapiens cDNA
6723	19557	32588	0.81	1.0E-130	AW843875.1	EST_HUMAN	CMO-CH0045-170200-225-g03 CH0045 Homo sapiens cDNA
6736	19570	32802	0.75	1.0E-130	11425446	NT	Homo sapiens estrogen-responsive B box protein (EBBP), mRNA
7154	19841	32910	2.62	1.0E-130	11416777	NT	Homo sapiens solute carrier family 6 (neurotransmitter transporter, L-proline), member 7 (SLC6A7), mRNA
8582	21274		0.45	1.0E-130	AF008551.1	NT	Homo sapiens aurora-related kinase 1 (ARK1), mRNA, complete cds
8718	21410	34553	2.39	1.0E-130	AW956242.1	EST_HUMAN	EST368312 IMAGE resequences, MAGD Homo sapiens cDNA
9114	21802	34957	1.64	1.0E-130	AB037766.1	NT	Homo sapiens mRNA for KIAA1335 protein, partial cds
9833	22484		1.25	1.0E-130	AW103454.1	EST_HUMAN	cd35606.x1 NCL CGAP_Ov23 Homo sapiens cDNA clone IMAGE:2595874 3'
10463	23109	36340	0.51	1.0E-130	11432889	NT	Homo sapiens contactin 6 (CNTN6), mRNA
10463	23109	36341	0.51	1.0E-130	11432889	NT	Homo sapiens contactin 6 (CNTN6), mRNA
11242	23904	37104	1.72	1.0E-130	8923197	NT	Homo sapiens hypothetical protein FLJ20208 (FLJ20208), mRNA
11242	23904	37195	1.72	1.0E-130	8923197	NT	Homo sapiens hypothetical protein FLJ20208 (FLJ20208), mRNA
11703	24298	37624	2.67	1.0E-130	4504142	NT	Homo sapiens glutamate receptor, metabotropic 5 (GRM5), mRNA
12759	15478		1.56	1.0E-130	ALJ010230.1	NT	Homo sapiens RET finger protein-like 1 antisense transcript, partial
4	12832	25445	1.9	0.0E+00	AA228126.1	EST_HUMAN	z5804.r1 Soares_NHMPu_S1 Homo sapiens cDNA clone IMAGE:667500 5' similar to TR:G222811
4	12832	25446	1.9	0.0E+00	AA228126.1	EST_HUMAN	z5804.r1 Soares_NHMPu_S1 Homo sapiens cDNA clone IMAGE:667500 5' similar to TR:G222811
7	12834	25449	1.02	0.0E+00	4885136	NT	G222811 ALPHA 1 CHAIN OF TYPE XII COLLAGEN ;
14	12841	25454	0.72	0.0E+00	8923349	NT	Homo sapiens checkpoint suppressor 1 (CHES1), mRNA
14	12841	25455	0.72	0.0E+00	8923349	NT	Homo sapiens hypothetical protein FLJ20371 (FLJ20371), mRNA
20	12848	25462	6.7	0.0E+00	D63327.1	NT	Homo sapiens hypothetical protein FLJ20371 (FLJ20371), mRNA
20	12848	25463	6.7	0.0E+00	D63327.1	NT	Homo sapiens DQRR1 mRNA, partial cds
25	12853	25468	17.04	0.0E+00	AF141349.1	NT	Homo sapiens DQRR1 mRNA, partial cds
33	12861	25478	1.19	0.0E+00	M58800.1	NT	Homo sapiens beta-tubulin mRNA, complete cds
35	12863	25481	0.82	0.0E+00	5902997	NT	Homo sapiens Cdc42 effector protein 2 (CEP2), mRNA
39	12867	25485	4.22	0.0E+00	6857825	NT	Human heparin cofactor II (HCF2) gene, exons 1 through 5
55	12894	25512	0.78	0.0E+00	Y17151.2	NT	Homo sapiens RNA-binding protein S1, serine-rich domain (RNPS1), mRNA
55	12894	25513	0.78	0.0E+00	Y17151.2	NT	Homo sapiens mRNA for multidrug resistance protein 3 (ABOC3)
56	12895	25514	3.04	0.0E+00	D78804.1	EST_HUMAN	HUM516H-1088 Human placenta polyA+ (TF-ujwara) Homo sapiens cDNA clone GEN-516H-08 5'
56	12895	25515	3.04	0.0E+00	D78804.1	EST_HUMAN	HUM516H-1088 Human placenta polyA+ (TF-ujwara) Homo sapiens cDNA clone GEN-516H-08 5'
57	12896	25516	5.78	0.0E+00	L16558.1	NT	Human ribosomal protein L7 (RPL7) mRNA, complete cds

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
59	12888	25519	12.55	0.0E+00	AW069534.1	EST_HUMAN	cr49e07.x1 Jla bone marrow stroma Homo sapiens cDNA clone HBMSC cr49e07 3'
58	12888	25520	12.55	0.0E+00	AW069534.1	EST_HUMAN	cr49e07.x1 Jla bone marrow stroma Homo sapiens cDNA clone HBMSC cr49e07 3'
53	12891	25524	1.5	0.0E+00	M60676.1	NT	Human von Willebrand factor pseudogene corresponding to exons 23 through 34
65	12893		0.91	0.0E+00	M60676.1	NT	Human von Willebrand factor pseudogene corresponding to exons 23 through 34
73	12900	25538	10.36	0.0E+00	4758977	NT	Homo sapiens protein tyrosine phosphatase, non-receptor type substrate 1 (PTPNS1) mRNA
73	12900	25537	10.36	0.0E+00	4758977	NT	Homo sapiens protein tyrosine phosphatase, non-receptor type substrate 1 (PTPNS1) mRNA
76	12900	25536	10.18	0.0E+00	4758977	NT	Homo sapiens protein tyrosine phosphatase, non-receptor type substrate 1 (PTPNS1) mRNA
76	12900	25537	10.18	0.0E+00	4758977	NT	Homo sapiens protein tyrosine phosphatase, non-receptor type substrate 1 (PTPNS1) mRNA
80	12906	25544	0.78	0.0E+00	4601860	NT	Homo sapiens anion channel binding protein 1 (amine oxidase (copper-containing)) (ABP1), nuclear gene encoding mitochondrial protein, mRNA
81	12907		15.25	0.0E+00	4504444	NT	Homo sapiens heterogeneous nuclear ribonucleoprotein A1 (HNRPA1) mRNA
80	12916	25553	17.68	0.0E+00	5018088	NT	Homo sapiens actin, beta (ACTB) mRNA
93	12919	25556	23.28	0.0E+00	U89277.1	NT	Human polyomavirus 1 homolog (HPV1) mRNA, partial cds
99	12925	25562	3.51	0.0E+00	A1114743.1	EST_HUMAN	HA1347 Human fetal liver cDNA library Homo sapiens cDNA
100	12926	25563	1.72	0.0E+00	AB037784.1	NT	Homo sapiens mRNA for KIAA1363 protein, partial cds
105	12928	25566	1.33	0.0E+00	X91213.1	NT	H. sapiens ncd1 gene (exon 2)
113	12935	25572	0.89	0.0E+00	A1623701.1	EST_HUMAN	ts38b05.x1 NCI_CGAP_U4 Homo sapiens cDNA clone IMAGE:2230833 3' similar to TR:Q98551 Q98551 MITOCHONDRIAL TRANSCRIPTION TERMINATION FACTOR PRECURSOR ;
114	12936	25572	1.47	0.0E+00	A1623701.1	EST_HUMAN	ts38b05.x1 NCI_CGAP_U4 Homo sapiens cDNA clone IMAGE:2230833 3' similar to TR:Q98551 Q98551 MITOCHONDRIAL TRANSCRIPTION TERMINATION FACTOR PRECURSOR ;
115	15513	25573	1.48	0.0E+00	N36040.1	EST_HUMAN	W01109.J1 Soares melanocyte 2NHM Homo sapiens cDNA clone IMAGE:270017 5'
115	15513	25574	1.48	0.0E+00	N36040.1	EST_HUMAN	W01109.J1 Soares melanocyte 2NHM Homo sapiens cDNA clone IMAGE:270017 5'
128	12943	25586	4.38	0.0E+00	4505938	NT	Homo sapiens polymerase (RNA) II (DNA directed) polypeptide A (220kD) (POLR2A) mRNA
128	12943	25587	4.38	0.0E+00	4505938	NT	Homo sapiens polymerase (RNA) II (DNA directed) polypeptide A (220kD) (POLR2A) mRNA
136	12950	25593	1.29	0.0E+00	T56945.1	EST_HUMAN	ye83g04.i2 Stratagene fetal spleen (#637205) Homo sapiens cDNA clone IMAGE:68310 5'
136	12950	25594	1.29	0.0E+00	T56945.1	EST_HUMAN	ye83g04.i2 Stratagene fetal spleen (#637205) Homo sapiens cDNA clone IMAGE:68310 5'
149	12964		8.88	0.0E+00	4504444	NT	Homo sapiens heterogeneous nuclear ribonucleoprotein A1 (HNRPA1) mRNA
153	12968	25609	2.1	0.0E+00	BF036881.1	EST_HUMAN	G01460378F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3663803 5'
155	12970		25.83	0.0E+00	4504444	NT	Homo sapiens heterogeneous nuclear ribonucleoprotein A1 (HNRPA1) mRNA
158	12973	25612	1	0.0E+00	AF111168.2	NT	Homo sapiens serine palmitoyl transferase, subunit II gene, complete cds; and unknown genes
160	12975	25613	1.15	0.0E+00	BE266973.1	EST_HUMAN	G01174270F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3629864 5'
161	12975	25613	0.88	0.0E+00	BE266973.1	EST_HUMAN	G01174270F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3629864 5'
162	12976	25614	5.4	0.0E+00	W73973.1	EST_HUMAN	z062505.1 Soares_fetal_heart_NbHH19W Homo sapiens cDNA clone IMAGE:345201 5' similar to gb:X16282_cds1 ZINC FINGER PROTEIN CLONE 647 (HUMAN);

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
163	12977	25615	0.81	0.0E+00	BE162832.1	EST_HUMAN	QV3-HT0457-140200-088-d04 HT0457 Homo sapiens cDNA
163	12977	25616	0.81	0.0E+00	BE162832.1	EST_HUMAN	QV3-HT0457-140200-088-d04 HT0457 Homo sapiens cDNA
164	12978	25617	1.42	0.0E+00	AF244088.1	NT	Homo sapiens zinc finger protein mRNA, complete cds
167	12981	25620	28.73	0.0E+00	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
167	12981	25621	28.73	0.0E+00	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
176	12988	25627	5.95	0.0E+00	BE018870.1	EST_HUMAN	bb24e12.y1 NIH_MGC_14 Homo sapiens cDNA clone IMAGE:2963854 5' similar to WP:Y57A10A.Z
176	12988	25628	5.95	0.0E+00	BE018870.1	EST_HUMAN	bb24e12.y1 NIH_MGC_14 Homo sapiens cDNA clone IMAGE:2963854 5' similar to WP:Y57A10A.Z
181	12993	25631	3.05	0.0E+00	AB018327.1	NT	Homo sapiens mRNA for KIAA0784 protein, partial cds
181	12993	25632	3.05	0.0E+00	AB018327.1	NT	Homo sapiens mRNA for KIAA0784 protein, partial cds
189	13002	25643	67.77	0.0E+00	D50659.1	NT	Human gamma-cytoplasmic actin (ACTGAP6) pseudogene
194	13007	25648	3.74	0.0E+00	AF273045.1	NT	Homo sapiens CTCL tumor antigen sst14-3 mRNA, complete cds
194	13007	25649	3.74	0.0E+00	AF273045.1	NT	Homo sapiens CTCL tumor antigen sst14-3 mRNA, complete cds
196	13009	25651	4.81	0.0E+00	AF167174.1	NT	Homo sapiens chromosome X MSL3-2 protein mRNA, complete cds
196	13009	25652	4.81	0.0E+00	AF167174.1	NT	Homo sapiens chromosome X MSL3-2 protein mRNA, complete cds
205	15537	25658	9.26	0.0E+00	AI587308.1	EST_HUMAN	tp0408.x1 NCI_CGAP_U13 Homo sapiens cDNA clone IMAGE:2207847 3' similar to gb:J03191 PROFILIN1 (HUMAN);
205	15537	25659	9.26	0.0E+00	AI587308.1	EST_HUMAN	tp0408.x1 NCI_CGAP_U13 Homo sapiens cDNA clone IMAGE:2207847 3' similar to gb:J03191 PROFILIN1 (HUMAN);
207	13019	25661	3.08	0.0E+00	AF189938.1	NT	Homo sapiens DNA mismatch repair protein (MLH3) gene, complete cds
209	13021		23.37	0.0E+00	4508632	NT	Homo sapiens ribosomal protein L31 (RPL31) mRNA
210	13022		4.72	0.0E+00	AF192000.1	NT	Homo sapiens TADA1 protein mRNA, complete cds
214	13026	25664	8.19	0.0E+00	AB018284.1	NT	Homo sapiens mRNA for KIAA0721 protein, partial cds
215	13026	25664	8.34	0.0E+00	AB018284.1	NT	Homo sapiens mRNA for KIAA0721 protein, partial cds
216	13027	25665	3.5	0.0E+00	6678444	NT	Mus musculus testis-specific protein, Y-encoded-like (Tepyl), mRNA
229	13041	25678	1.23	0.0E+00	AB018301.1	NT	Homo sapiens mRNA for KIAA0768 protein, partial cds
229	13041	25679	1.23	0.0E+00	AB018301.1	NT	Homo sapiens mRNA for KIAA0768 protein, partial cds
231	13042	25682	3.97	0.0E+00	6459805	NT	Homo sapiens NS1-associated protein 1 (NSAP1) mRNA
233	13044		8.94	0.0E+00	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
240	13049	25688	3.85	0.0E+00	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
242	13051	25691	1.71	0.0E+00	X89772.1	NT	H. sapiens mRNA for interferon alpha/beta receptor (long form)
250	13059		9.14	0.0E+00	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
263	13071	25710	1.68	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA

Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
263	13071	25711	1.88	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
265	13073	25713	3.07	0.0E+00	7700028	NT	Homo sapiens hypothetical protein (LOC51250), mRNA
276	13083		1.19	0.0E+00	D83327.1	NT	Homo sapiens DCRR1 mRNA, partial cds
277	13084	25726	3.28	0.0E+00	D83327.1	NT	Homo sapiens DCRR1 mRNA, partial cds
278	13084	25727	3.28	0.0E+00	D83327.1	NT	Homo sapiens DCRR1 mRNA, partial cds
278	13085		0.78	0.0E+00	AW846283.1	EST_HUMAN	IL2-CT0031-181189-020-B03 CT0031 Homo sapiens cDNA
287	13093	25734	6.65	0.0E+00	4557028	NT	Homo sapiens potassium inwardly-rectifying channel, subfamily J, member 15 (KCNJ15) mRNA
287	13093	25735	6.65	0.0E+00	4557028	NT	Homo sapiens potassium inwardly-rectifying channel, subfamily J, member 15 (KCNJ15) mRNA
297	13103	25744	4.97	0.0E+00	AB028942.1	NT	Homo sapiens mRNA for KIAA1019 protein, partial cds
298	13104	25745	4.63	0.0E+00	AB028942.1	NT	Homo sapiens mRNA for KIAA1019 protein, partial cds
299	15540		4.23	0.0E+00	4506728	NT	Homo sapiens ribosomal protein S5 (RPS5) mRNA
300	13105		3.76	0.0E+00	AA480002.1	EST_HUMAN	zvl8c06.r1 Soares NIHMPu_S1 Homo sapiens cDNA clone IMAGE:763984 5'
301	13106	25746	18.93	0.0E+00	4507182	NT	Homo sapiens SON DNA binding protein (SON) mRNA
302	13106	25746	16.53	0.0E+00	4507182	NT	Homo sapiens SON DNA binding protein (SON) mRNA
308	13110	25760	2.33	0.0E+00	AF114488.1	NT	Homo sapiens Intersectin short isoform (ITSN) mRNA, complete cds
319	13122	25769	4.97	0.0E+00	7857213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
320	13122	25769	6.23	0.0E+00	7857213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
335	13136	25771	2.66	0.0E+00	5174574	NT	Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (t(11q24) homologue); translocated to, 4 (MLLT4) mRNA
338	13139	25775	1.71	0.0E+00	4827057	NT	Homo sapiens X-box binding protein 1 (XBP1) mRNA
341	13142	25780	1.45	0.0E+00	U71600.1	NT	Human zinc finger protein zfp31 (zfp31) mRNA, partial cds
346	13146	25784	2.42	0.0E+00	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
346	13146	25785	2.42	0.0E+00	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
347	15541	25786	3.84	0.0E+00	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
349	13148	25788	2.33	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
352	13151	25792	0.94	0.0E+00	4503854	NT	Homo sapiens GA-binding protein transcription factor, alpha subunit (GABPA), mRNA
353	13152	25793	4.1	0.0E+00	D80008.1	NT	Human mRNA for KIAA0184 gene, partial cds
354	13152	25793	1.9	0.0E+00	D80008.1	NT	Human mRNA for KIAA0184 gene, partial cds
356	13154	25795	1.89	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
367	13163	25806	1.07	0.0E+00	AU134983.1	EST_HUMAN	AU134983 PLACE1 Homo sapiens cDNA clone PLACE1000893 5'
378	13203	25849	8.31	0.0E+00	AB028942.1	NT	Homo sapiens mRNA for KIAA1019 protein, partial cds
379	13204	25850	1.54	0.0E+00	A1363014.1	EST_HUMAN	q961h05.x1 NCL_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2018457 3' similar to gb.X54199 PHOSPHORIBOSYLAMINE--GLYCINE LIGASE (HUMAN);
383	13170	25813	1.83	0.0E+00	AW754180.1	EST_HUMAN	RC2-CT0320-300700-016-a09 CT0320 Homo sapiens cDNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
366	13172	25816	1.98	0.0E+00	4503680	NT	Homo sapiens IgG Fc binding protein (FC(GAMMA)BP) mRNA
367	13173	25817	2.49	0.0E+00	4503680	NT	Homo sapiens IgG Fc binding protein (FC(GAMMA)BP) mRNA
367	13173	25818	2.49	0.0E+00	4503680	NT	Homo sapiens IgG Fc binding protein (FC(GAMMA)BP) mRNA
368	13174	25819	1.17	0.0E+00	4503680	NT	Homo sapiens IgG Fc binding protein (FC(GAMMA)BP) mRNA
368	13175	25820	1.39	0.0E+00	4503680	NT	Homo sapiens IgG Fc binding protein (FC(GAMMA)BP) mRNA
369	13175	25821	1.39	0.0E+00	4503680	NT	Homo sapiens IgG Fc binding protein (FC(GAMMA)BP) mRNA
390	13176	25822	2.77	0.0E+00	4503680	NT	Homo sapiens IgG Fc binding protein (FC(GAMMA)BP) mRNA
391	13177	25823	0.84	0.0E+00	4503680	NT	Homo sapiens IgG Fc binding protein (FC(GAMMA)BP) mRNA
392	13178	25824	1.35	0.0E+00	X74870.1	NT	H. sapiens gene for RNA pol II largest subunit, exons 23-29
392	13178	25825	1.35	0.0E+00	X74870.1	NT	H. sapiens gene for RNA pol II largest subunit, exons 23-29
393	13178	25824	1.07	0.0E+00	X74870.1	NT	H. sapiens gene for RNA pol II largest subunit, exons 23-29
393	13178	25825	1.07	0.0E+00	X74870.1	NT	H. sapiens gene for RNA pol II largest subunit, exons 23-29
397	13182	25435	28.13	0.0E+00	4503680	NT	Homo sapiens ribosomal protein L19 (RPL19) mRNA
411	12822	25435	1.5	0.0E+00	R17795.1	EST_HUMAN	yg09a02.r1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:31652 5'
419	13206	25851	1.31	0.0E+00	4503814	NT	Homo sapiens phosphoribosylglycinamide formyltransferase, phosphoribosylamimidazole synthetase (GART) mRNA
420	13206		3.18	0.0E+00	4506728	NT	Homo sapiens ribosomal protein S5 (RPS5) mRNA
421	13207	25852	3.83	0.0E+00	AB026942.1	NT	Homo sapiens mRNA for KIAA1019 protein, partial cds
422	13208	25853	5.45	0.0E+00	4507152	NT	Homo sapiens SON DNA binding protein (SON) mRNA
422	13208	25854	5.45	0.0E+00	4507152	NT	Homo sapiens SON DNA binding protein (SON) mRNA
423	13209	25855	4.02	0.0E+00	AF193907.1	NT	Mus musculus truncated SON protein (Son) mRNA, complete cds
433	13219	25865	1.98	0.0E+00	4557878	NT	Homo sapiens interferon gamma receptor 1 (IFNGR1) mRNA
438	13224		2.01	0.0E+00	AA324262.1	EST_HUMAN	EST27064 Carabellum II Homo sapiens cDNA 5' end
439	13225		0.97	0.0E+00	BE254447.1	EST_HUMAN	601111520F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3352348 5'
455	13241	25879	3.15	0.0E+00	4504532	NT	Homo sapiens 5-hydroxytryptamine (serotonin) receptor 1B (HTR1B) mRNA
455	13241	25880	3.15	0.0E+00	4504532	NT	Homo sapiens 5-hydroxytryptamine (serotonin) receptor 1B (HTR1B) mRNA
461	13246	25888	1.23	0.0E+00	4557887	NT	Homo sapiens keratin 18 (KRT18) mRNA
461	13246	25889	1.23	0.0E+00	4557887	NT	Homo sapiens keratin 18 (KRT18) mRNA
471	13257	25895	2.64	0.0E+00	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
472	13258	25896	9.28	0.0E+00	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
472	13258	25897	9.28	0.0E+00	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
481	13266	25902	3.46	0.0E+00	AB033036.1	NT	Homo sapiens mRNA for KIAA1208 protein, partial cds
483	13268	25904	1.97	0.0E+00	AU132898.1	EST_HUMAN	AU132898 NT2RP4 Homo sapiens cDNA clone NT2RP4000837 5'
491	13276	25910	2.68	0.0E+00	BE385144.1	EST_HUMAN	601274951F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3615758 5'



Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
492	15543	25911	1.11	0.0E+00	AW988825.1	EST_HUMAN	PMO-DT0095-130400-002-c08 DT0085 Homo sapiens cDNA
494	13278	25913	1.33	0.0E+00	AL117233.1	NT	Novel human gene mapping to chromosome 1
495	13279	25914	1.27	0.0E+00	8923955	NT	Homo sapiens PC328 protein (PC328), mRNA
499	13283		0.77	0.0E+00	BF373403.1	EST_HUMAN	IL2-FT0159-070800-120-F07 FT0159 Homo sapiens cDNA
608	13290	25924	5.37	0.0E+00	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
513	15544	25928	1.29	0.0E+00	BE081527.1	EST_HUMAN	QV2-BT0635-160400-142-H05 BT0635 Homo sapiens cDNA
518	13302	25934	1.14	0.0E+00	BF028005.1	EST_HUMAN	801764858F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3688998 5'
524	13308	25941	1.08	0.0E+00	AB040909.1	NT	Homo sapiens mRNA for KIAA1476 protein, partial cds
527	13311	25944	27.88	0.0E+00	6008030	NT	Homo sapiens transcription elongation factor B (SII), polypeptide 1-like (TCCEB1L), mRNA
528	13312	25945	4.33	0.0E+00	4504036	NT	Homo sapiens guanine nucleotide binding protein (G protein), alpha 11 (Gq class) (GNA11), mRNA
528	13312	25946	4.33	0.0E+00	4504036	NT	Homo sapiens guanine nucleotide binding protein (G protein), alpha 11 (Gq class) (GNA11), mRNA
530	13314	25948	0.97	0.0E+00	8923831	NT	Homo sapiens anillin (LOC54443), mRNA
530	13314	25949	0.97	0.0E+00	8923831	NT	Homo sapiens anillin (LOC54443), mRNA
							Homo sapiens X-linked arylidic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
535	13318		5.82	0.0E+00	AF003528.1	NT	UI-H-B11-ecb-h-04-Q-UI.s1 NCI CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2713951 3'
543	13326	25958	1.89	0.0E+00	AW135324.1	EST_HUMAN	Homo sapiens RGH1 gene, retrovirus-like element
553	13336		8	0.0E+00	D10083.1	NT	Homo sapiens ubiquinol-cytochrome c reductase, Rieske iron-sulfur polypeptide 1 (UQCRCF1), nuclear gene encoding mitochondrial protein, mRNA
572	13353	25962	2.63	0.0E+00	5174742	NT	Human apolipoprotein A-I (ApoA-I) gene, exon 1
585	13365		7	0.0E+00	J04086.1	NT	601822627F1 NIH_MGC_75 Homo sapiens cDNA clone IMAGE:4045447 5'
588	13368	25968	1.83	0.0E+00	BF104698.1	EST_HUMAN	Homo sapiens hypothetical protein FLJ20701 (FLJ20701), mRNA
590	13370	25968	0.98	0.0E+00	8923831	NT	Homo sapiens hypothetical protein FLJ20701 (FLJ20701), mRNA
590	13370	25969	0.98	0.0E+00	8923831	NT	Homo sapiens hypothetical protein FLJ20701 (FLJ20701), mRNA
596	13373	26002	0.76	0.0E+00	4501854	NT	Homo sapiens acetyl-Coenzyme A carboxylase beta (ACACB), mRNA
600	13378	26008	1.15	0.0E+00	AF221712.1	NT	Homo sapiens Smad- and Olf-interacting zinc finger protein mRNA, partial cds
600	13378	26009	1.15	0.0E+00	AF221712.1	NT	Homo sapiens Smad- and Olf-interacting zinc finger protein mRNA, partial cds
609	13387	26018	3.18	0.0E+00	AF149773.1	NT	Homo sapiens NOD1 protein (NOD1) gene, exons 1, 2, and 3
612	13390	26021	1.2	0.0E+00	8908918	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
613	13391	26022	3.83	0.0E+00	8908918	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
613	13391	26023	3.83	0.0E+00	8908918	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
614	13392	26024	0.92	0.0E+00	8908918	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
614	13392	26025	0.92	0.0E+00	8908918	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
620	13399	26034	1.35	0.0E+00	AA399486.1	EST_HUMAN	z690c07.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:726732 5'
624	13403	26038	10.1	0.0E+00	D11078.1	NT	Homo sapiens RGH2 gene, retrovirus-like element

Table 4  
Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
628	13407	26041	0.76	0.0E+00	W78811.1	EST_HUMAN	zh51b04.l1 Soares fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:415567 5' similar to gb:A21187 ALPHA-2-MACROGLOBULIN/PRCURSOR (HUMAN);
628	13407	26042	0.76	0.0E+00	W78811.1	EST_HUMAN	zh51b04.l1 Soares fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:415567 5' similar to gb:A21187 ALPHA-2-MACROGLOBULIN/PRCURSOR (HUMAN);
631	13410		4.89	0.0E+00	4885528	NT	Homo sapiens novel SH2-containing protein 3 (NSP3) mRNA
638	13417	26054	2.88	0.0E+00	6008003	NT	Homo sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 2B (GRIN2B) mRNA
640	13419	26057	1.17	0.0E+00	5031824	NT	Homo sapiens CCAAT-box-binding transcription factor (CBF2) mRNA
643	13422	26061	2.53	0.0E+00	U05235.1	NT	Human neutral amino acid transporter (ASCT1) gene, exon 8
647	13426	26064	1.07	0.0E+00	AF108389.1	NT	Homo sapiens sodium/calcium exchanger isoform NaCa3 (NCX1) mRNA, complete cds
647	13426	26066	1.07	0.0E+00	AF108389.1	NT	Homo sapiens sodium/calcium exchanger isoform NaCa3 (NCX1) mRNA, complete cds
653	13431	26070	4.98	0.0E+00	4828947	NT	Homo sapiens protein kinase, X-linked (PRKX) mRNA
653	13431	26071	4.98	0.0E+00	4828947	NT	Homo sapiens protein kinase, X-linked (PRKX) mRNA
660	13437		1.15	0.0E+00	X57147.1	NT	Human endogenous retrovirus pHE-1 (ERV9)
667	13443	26084	10.4	0.0E+00	4504424	NT	Homo sapiens high-mobility group (nonhistone chromosomal) protein 1 (HMG1) mRNA
672	13448	26088	4.49	0.0E+00	AB028012.1	NT	Homo sapiens mRNA for KIAA1089 protein, partial cds
681	13456	26101	2.43	0.0E+00	7657468	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
683	13468	26115	9.24	0.0E+00	AA614537.1	EST_HUMAN	np49d01.s1 NCI_CGAP_B1.1 Homo sapiens cDNA clone IMAGE:1129633 3' similar to gb:X57352 INTERFERON-INDUCIBLE PROTEIN 1-8U (HUMAN);
696	13471	26119	4.34	0.0E+00	M60675.1	NT	Human von Willebrand factor gene, exons 23 through 34
696	13471	26120	4.34	0.0E+00	M60675.1	NT	Human von Willebrand factor gene, exons 23 through 34
706	13481	26129	1.71	0.0E+00	5032192	NT	Homo sapiens TNF receptor-associated factor 1 (TRAF1) mRNA
712	13486	26135	4.95	0.0E+00	AF264750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
712	13486	26138	4.95	0.0E+00	AF264750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
714	13488	26139	12.29	0.0E+00	11545800	NT	Homo sapiens hypothetical protein FLJ21634 (FLJ21634), mRNA
719	13493	26146	2.12	0.0E+00	BE241577.1	EST_HUMAN	TCAAP1D0770 Pediatric acute myelogenous leukemia cell (FAB M1) Baylor-HGSC project=TCAA Homo sapiens cDNA clone TCAAP0779
739	13512	26170	1.07	0.0E+00	AF226990.2	NT	Homo sapiens MHC class I antigen (HLA-G) mRNA, HLA-G1 allele, complete cds
739	13512	26171	1.07	0.0E+00	AF226990.2	NT	Homo sapiens MHC class I antigen (HLA-G) mRNA, HLA-G1 allele, complete cds
740	13513	26172	2.41	0.0E+00	AF170492.1	NT	Homo sapiens chloride channel CLCA (CLCA), complete cds
743	13516	26175	1.07	0.0E+00	J03784.1	NT	Human, plasminogen activator inhibitor-1 gene, exons 2 to 9
743	13516	26176	1.07	0.0E+00	J03784.1	NT	Human, plasminogen activator inhibitor-1 gene, exons 2 to 9
746	13519	26177	1.38	0.0E+00	6912749	NT	Homo sapiens zinc finger protein 212 (ZNF212), mRNA
748	13551	26179	1.86	0.0E+00	D30612.1	NT	Homo sapiens mRNA for repressor protein, partial cds
749	13521	26180	3.01	0.0E+00	BE869735.1	EST_HUMAN	801445647F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3849803 5'

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
752	13524	26183	3.51	0.0E+00	R48915.1	EST_HUMAN	y89g08.r1 Soares breast 2Nbr1Bst Homo sapiens cDNA clone IMAGE:154046 5'
753	13525	26184	2.4	0.0E+00	5032086	NT	Homo sapiens splicing factor 3a, subunit 1, 120kD (SF3A1), mRNA
761	13533	26192	2.07	0.0E+00	AB011390.1	NT	Homo sapiens gene for AF-6, complete cds
764	13537	26196	2.34	0.0E+00	7861985	NT	Homo sapiens KIAA0170 gene product (KIAA0170), mRNA
775	13547	26208	1.18	0.0E+00	D80006.1	NT	Human mRNA for KIAA0184 gene, partial cds
775	13547	26209	1.18	0.0E+00	D80006.1	NT	Human mRNA for KIAA0184 gene, partial cds
780	13552	26213	2.13	0.0E+00	X88772.1	NT	H. sapiens mRNA for interferon alphabeta receptor (long form)
784	13556	26217	5.97	0.0E+00	AB020717.1	NT	Homo sapiens mRNA for KIAA0910 protein, partial cds
784	13556	26218	5.97	0.0E+00	AB020717.1	NT	Homo sapiens mRNA for KIAA0910 protein, partial cds
788	13560	26222	9.88	0.0E+00	5174478	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
789	13561	26222	11.03	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
805	13577	26242	1.98	0.0E+00	7867213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
806	13578	26243	4.28	0.0E+00	7867213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
808	13580	26243	2.81	0.0E+00	7867213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
814	13585	26251	1.39	0.0E+00	AF108830.1	NT	Homo sapiens serine-threonine protein kinase (MINBH) mRNA, complete cds
814	13585	26252	1.39	0.0E+00	AF108830.1	NT	Homo sapiens serine-threonine protein kinase (MINBH) mRNA, complete cds
819	13590	26257	1.58	0.0E+00	4303854	NT	Homo sapiens GA-binding protein transcription factor, alpha subunit (GABPA), mRNA
823	13593	26262	2.09	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
823	13593	26263	2.09	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
830	13600	26274	1.32	0.0E+00	AF027153.1	NT	Homo sapiens sodium/myo-inositol cotransporter (SLC5A3) gene, complete cds
834	13604	26274	4.62	0.0E+00	AB028942.1	NT	Homo sapiens mRNA for KIAA1019 protein, partial cds
834	13604	26276	4.62	0.0E+00	AB028942.1	NT	Homo sapiens mRNA for KIAA1019 protein, partial cds
835	13605	26278	9.50	0.0E+00	4507152	NT	Homo sapiens SON DNA binding protein (SON) mRNA
836	13606	26277	4.34	0.0E+00	AB028942.1	NT	Homo sapiens mRNA for KIAA1019 protein, partial cds
837	13607	26278	0.8	0.0E+00	4508728	NT	Homo sapiens ribosomal protein S5 (RPS5) mRNA
841	13611	26281	2.2	0.0E+00	AB020717.1	NT	Homo sapiens mRNA for KIAA0910 protein, partial cds
841	13611	26282	2.2	0.0E+00	AB020717.1	NT	Homo sapiens mRNA for KIAA0910 protein, partial cds
842	13612	26283	2.46	0.0E+00	AA633272.1	EST_HUMAN	U96407.s1 NCI CGAP_P110 Homo sapiens cDNA clone IMAGE:997453
842	13612	26284	2.45	0.0E+00	AA633272.1	EST_HUMAN	U96407.s1 NCI CGAP_P110 Homo sapiens cDNA clone IMAGE:997453
843	13613	26285	9.44	0.0E+00	BF677894.1	EST_HUMAN	602085579F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4249815 5'
847	13617	26285	1.94	0.0E+00	7867213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
847	13617	26286	1.94	0.0E+00	7867213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
848	13618	26287	3.31	0.0E+00	7867213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
848	13618	26288	3.31	0.0E+00	7867213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
871	13640	26311	0.91	0.0E+00	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
878	13647	26316	2.57	0.0E+00	BE089592.1	EST_HUMAN	QV0-BT0703-280400-211-g11 BT0703 Homo sapiens cDNA
878	13647	26317	2.57	0.0E+00	BE089592.1	EST_HUMAN	QV0-BT0703-280400-211-g11 BT0703 Homo sapiens cDNA
888	13657	26320	6.48	0.0E+00	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
888	13668		4.90	0.0E+00	4504958	NT	Homo sapiens keratin receptor 1 (87kD, ribosomal protein SA) (LAMR1), mRNA
900	13668		8.49	0.0E+00	4504958	NT	Homo sapiens keratin receptor 1 (87kD, ribosomal protein SA) (LAMR1), mRNA
901	13668	26332	1.21	0.0E+00	AF089747.1	NT	Homo sapiens alpha-1-antitrypsin precursor, mRNA, partial cds
902	13668	26333	1.78	0.0E+00	L28101.1	NT	Homo sapiens kallistatin (PI4) gene, exons 1-4, complete cds
905	13672	26336	1.05	0.0E+00	Z20656.1	NT	Homo sapiens of cardiac alpha-myosin heavy chain gene
905	13672	26337	1.05	0.0E+00	Z20656.1	NT	Homo sapiens of cardiac alpha-myosin heavy chain gene
928	13683	26356	2.98	0.0E+00	AB023211.1	NT	Homo sapiens mRNA for KIAA0984 protein, partial cds
928	13683	26357	2.98	0.0E+00	AB023211.1	NT	Homo sapiens mRNA for KIAA0984 protein, partial cds
931	13686	26362	1.19	0.0E+00	M37190.1	NT	Human ras inhibitor mRNA, 3' end
932	13689	26363	9.05	0.0E+00	M37190.1	NT	Human ras inhibitor mRNA, 3' end
933	13700	26364	0.9	0.0E+00	M37190.1	NT	Human ras inhibitor mRNA, 3' end
934	13701	26365	2.18	0.0E+00	4507430	NT	Homo sapiens thyroidic embryonic factor (TEF), mRNA
934	13701	26366	2.18	0.0E+00	4507430	NT	Homo sapiens thyroidic embryonic factor (TEF), mRNA
942	15558	26373	3.38	0.0E+00	A1001948.1	EST_HUMAN	os98e03.s1 NCI_CGAP_G03 Homo sapiens cDNA clone IMAGE:1613404.3'
942	15558	26374	3.38	0.0E+00	A1001948.1	EST_HUMAN	os98e03.s1 NCI_CGAP_G03 Homo sapiens cDNA clone IMAGE:1613404.3'
943	13709	26375	9.49	0.0E+00	7857286	NT	Homo sapiens KIAA0929 protein Mac2 interacting nuclear target (MINT) homolog (KIAA0929), mRNA
954	13719	26385	3.18	0.0E+00	AB030596.1	NT	Homo sapiens mRNA for PSP24, complete cds
962	13727	26391	1.11	0.0E+00	BF368974.1	EST_HUMAN	PM2-GN0014-050900-001-02 GN0014 Homo sapiens cDNA
962	13727	26392	1.11	0.0E+00	BF368974.1	EST_HUMAN	PM2-GN0014-050900-001-02 GN0014 Homo sapiens cDNA
962	13727	26393	1.11	0.0E+00	BF368974.1	EST_HUMAN	PM2-GN0014-050900-001-02 GN0014 Homo sapiens cDNA
963	13728	26394	1.89	0.0E+00	X52207.1	NT	Homo sapiens partial o-fgr gene, exons 2 and 3
963	13728	26395	1.89	0.0E+00	X52207.1	NT	Homo sapiens partial o-fgr gene, exons 2 and 3
972	13737	28402	2.03	0.0E+00	4757969	NT	Homo sapiens chromodomain protein, Y chromosome-like (CDYL) mRNA
984	13748	28410	1.06	0.0E+00	U83698.1	NT	Human beta-tubulin (TUB4q) gene, complete cds
985	13749	28411	50.9	0.0E+00	U83698.1	NT	Human beta-tubulin (TUB4q) gene, complete cds
986	13749	28411	25.17	0.0E+00	U83698.1	NT	Human beta-tubulin (TUB4q) gene, complete cds
989	13752		5.52	0.0E+00	AF108400.1	NT	Homo sapiens 8q22.1 region and MTG8 (CBFA2T1) gene, partial cds
990	13752		8.64	0.0E+00	AF108400.1	NT	Homo sapiens 8q22.1 region and MTG8 (CBFA2T1) gene, partial cds
993	13755	26416	1.17	0.0E+00	AF111170.3	NT	Homo sapiens 14q32 jagged2 gene, complete cds; and unknown gene

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
984	13755	28416	1.83	0.0E+00	AF111170.3	NT	Homo sapiens 14q32 Jagged2 gene, complete cds; and unknown gene
985	13755	28416	2.3	0.0E+00	AF111170.3	NT	Homo sapiens 14q32 Jagged2 gene, complete cds; and unknown gene
986	13756	28417	3.76	0.0E+00	AF111170.3	NT	Homo sapiens 14q32 Jagged2 gene, complete cds; and unknown gene
988	13759	28420	3.06	0.0E+00	7001685	NT	Homo sapiens DKFZP586M0122 protein (DKFZP586M0122), mRNA
1003	13763	28424	2.5	0.0E+00	5803114	NT	Homo sapiens inner membrane protein, mitochondrial (mitofilin) (IMMT), mRNA
1004	13764		1.43	0.0E+00	AA486880.1	EST_HUMAN	es89g07.s1 Stratagene fetal retina 837202 Homo sapiens cDNA clone IMAGE:838236 3' similar to SW:PR58_HUMAN P47210 28S PROTEASE REGULATORY SUBUNIT 8;
1007	13767	28428	1.9	0.0E+00	N43182.1	EST_HUMAN	EST5124 WATM1 Homo sapiens cDNA clone 51124 similar to DNA-DIRECTED RNA POLYMERASE II (alignment Ser and Pro with BLASTx or p)
1007	13767	28429	1.9	0.0E+00	N43182.1	EST_HUMAN	EST5124 WATM1 Homo sapiens cDNA clone 51124 similar to DNA-DIRECTED RNA POLYMERASE II (alignment Ser and Pro with BLASTx or p)
1010	13770		3.55	0.0E+00	8922833	NT	Homo sapiens hypothetical protein FLJ11108 (FLJ11108), mRNA
1025	13785	28445	2.49	0.0E+00	4758869	NT	Homo sapiens heat shock 70kD protein 98 (mortalin-2) (HSPA9B), mRNA
1043	13802	28460	1.89	0.0E+00	4820672	NT	Homo sapiens cadherin 6, K-cadherin (fetal kidney) (CDH6), mRNA
1043	13802	28461	1.89	0.0E+00	4820672	NT	Homo sapiens cadherin 6, K-cadherin (fetal kidney) (CDH6), mRNA
1047	13806	28465	3.63	0.0E+00	8923624	NT	Homo sapiens hypothetical protein FLJ20695 (FLJ20695), mRNA
1047	13806	28466	3.63	0.0E+00	8923624	NT	Homo sapiens hypothetical protein FLJ20695 (FLJ20695), mRNA
1048	13807	28467	119.02	0.0E+00	AJ245022.1	NT	Homo sapiens mRNA for alpha-tubulin 8 (TUBA8 gene)
1050	13808		1.19	0.0E+00	8923087	NT	Homo sapiens hypothetical protein FLJ20080 (FLJ20080), mRNA
1052	13811	28471	3.52	0.0E+00	5174394	NT	Homo sapiens alkylated repair, alkB homolog (ABH), mRNA
1060	13818	28480	2.3	0.0E+00	4758117	NT	Homo sapiens Death associated protein 3 (DAP3), mRNA
1074	13832	28490	2.2	0.0E+00	BE005208.1	EST_HUMAN	MRD-BN0115-200300-003-H08 BN0115 Homo sapiens cDNA
1097	13855	28514	6.04	0.0E+00	7706134	NT	Homo sapiens potassium channel, subfamily K, member 9 (KCNK9), mRNA
1097	13855	28515	6.04	0.0E+00	7706134	NT	Homo sapiens potassium channel, subfamily K, member 9 (KCNK9), mRNA
1110	13867	28526	0.9	0.0E+00	4826947	NT	Homo sapiens protein kinase, X-linked (PRKX), mRNA
1110	13867	28528	0.9	0.0E+00	4826947	NT	Homo sapiens protein kinase, X-linked (PRKX), mRNA
1111	13868	28527	4.27	0.0E+00	4508712	NT	Homo sapiens ribosomal protein S27a (RPS27A), mRNA
1113	13870	28529	0.96	0.0E+00	8023290	NT	Homo sapiens hypothetical protein FLJ20309 (FLJ20309), mRNA
1118	13873	28532	23.77	0.0E+00	AB002059.1	NT	Homo sapiens DNA for Human P2XM, complete cds
1118	13876	28533	44.3	0.0E+00	AB002059.1	NT	Homo sapiens DNA for Human P2XM, complete cds
1119	13876	28534	5.51	0.0E+00	7657468	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
1119	13876	28535	5.51	0.0E+00	7657468	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
1122	13878	28537	1.1	0.0E+00	7706500	NT	Homo sapiens Npw38-binding protein NpwBP (LOC51728), mRNA
1123	13879	28538	0.87	0.0E+00	X95826.1	NT	H. sapiens ART4 gene

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No:	Top Hit Database Source	Top Hit Descriptor
1123	13879	26539	0.87	0.0E+00	X95826.1	NT	H. sapiens ART4 gene
1124	13880	26540	0.92	0.0E+00	AI147650.1	EST_HUMAN	qb22410.x1 Soares_pregnant_uterus_Nb-IPU Homo sapiens cDNA clone IMAGE:1697011 3'
1126	13882	26542	1.56	0.0E+00	AB020710.1	NT	Homo sapiens mRNA for KIAA0903 protein, partial cds
1133	13889	26548	0.71	0.0E+00	4758081	NT	Homo sapiens chondroitin sulfate proteoglycan 2 (versican) (CSPG2) mRNA
1133	13889	26549	0.71	0.0E+00	4758081	NT	Homo sapiens chondroitin sulfate proteoglycan 2 (versican) (CSPG2) mRNA
1134	13890	26550	1.39	0.0E+00	9098844	NT	Homo sapiens chondroitin sulfate proteoglycan 3 (C12ORF3), mRNA
1145	13900	26561	6.83	0.0E+00	7305078	NT	Homo sapiens chromosome 12 open reading frame 3 (C12ORF3), mRNA
1145	13900	26562	6.83	0.0E+00	7305078	NT	Homo sapiens glutamate decarboxylase 1 (brain, 67kD) (GAD1), transcript variant GAD25, mRNA
1148	13903	26565	1.85	0.0E+00	AB037835.1	NT	Homo sapiens glutamate decarboxylase 1 (brain, 67kD) (GAD1), transcript variant GAD25, mRNA
1155	13910	26574	0.76	0.0E+00	4557887	NT	Homo sapiens mRNA for KIAA1414 protein, partial cds
1167	13921	26583	4.54	0.0E+00	AF034996.1	NT	Homo sapiens keratin 18 (KRT18) mRNA
1187	13939	26617	1.7	0.0E+00	7657336	NT	Homo sapiens amphiphysin 1 mRNA, alternative splice isoform, complete cds
1201	13953	26621	1.53	0.0E+00	AF284750.1	NT	Homo sapiens mult. (E. coli) homolog 3 (MLH3), mRNA
1204	13956	26620	1.53	0.0E+00	AF284750.1	NT	Homo sapiens hypothetical protein FLJ10697 (FLJ10697), mRNA
1204	13956	26621	1.53	0.0E+00	AF284750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
1205	13957	26622	1.77	0.0E+00	AF284750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
1206	15562	26623	1.53	0.0E+00	AF284750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
1224	13974	26646	9.12	0.0E+00	AF109718.1	NT	Homo sapiens chromosome 3 subtelomeric region
1225	13975	26647	1.71	0.0E+00	4503088	NT	Homo sapiens chondroitin sulfate proteoglycan 4 (melanoma-associated) (CSPG4), mRNA
1243	13982	26667	2.33	0.0E+00	Y18000.1	NT	Homo sapiens NF2 gene
1251	14000	26667	23.59	0.0E+00	4508718	NT	Homo sapiens ribosomal protein S2 (RPS2) mRNA
1258	14007	26676	3.07	0.0E+00	AF084479.1	NT	Homo sapiens Williams-Beuren syndrome deletion transcript 9 (WBSOR9) mRNA, complete cds
1265	14014	26681	2.07	0.0E+00	AB040940.1	NT	Homo sapiens mRNA for KIAA1507 protein, partial cds
1266	14014	26682	2.07	0.0E+00	AB040940.1	NT	Homo sapiens mRNA for KIAA1507 protein, partial cds
1277	14027	26696	2.04	0.0E+00	5174748	NT	Homo sapiens Wolfram syndrome (WFS) mRNA
1277	14027	26696	2.04	0.0E+00	5174748	NT	Homo sapiens Wolfram syndrome (WFS) mRNA
1277	14027	26697	2.04	0.0E+00	5174748	NT	Homo sapiens Wolfram syndrome (WFS) mRNA
1278	14028	26709	3.78	0.0E+00	AF098166.1	NT	Homo sapiens Wolfram syndrome (WFS) mRNA
1288	15564	26710	1.53	0.0E+00	7657529	NT	Homo sapiens protein phosphatase 2A BR gamma subunit gene, exon 5
1288	15564	26710	1.53	0.0E+00	7657529	NT	Homo sapiens protein phosphatase 2A BR gamma subunit gene, exon 5
1293	14042	26715	2.03	0.0E+00	5803146	NT	Homo sapiens ribonucleotide reductase subunit 1 (RDR1), mRNA
1294	14043	26716	0.99	0.0E+00	4508004	NT	Homo sapiens ring finger protein 173 (ZNF173) mRNA
1296	14045	26717	1.12	0.0E+00	5803146	NT	Homo sapiens ring finger protein 173 (ZNF173) mRNA
1297	14046	26718	0.72	0.0E+00	4508004	NT	Homo sapiens zinc finger protein 173 (ZNF173) mRNA

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1298	14048	28720	4.71	0.0E+00	AB011149.1	NT	Homo sapiens mRNA for KIAA0577 protein, complete cds
1300	14049	28721	2.04	0.0E+00	7681985	NT	Homo sapiens KIAA0170 gene product (KIAA0170), mRNA
1301	14050	28722	6.88	0.0E+00	7681985	NT	Homo sapiens KIAA0170 gene product (KIAA0170), mRNA
1302	14051	28723	3.01	0.0E+00	8587387	NT	Homo sapiens period (Drosophila) homolog 3 (PER3), mRNA
1302	14051	28724	3.01	0.0E+00	8587387	NT	Homo sapiens period (Drosophila) homolog 3 (PER3), mRNA
1314	14062	28737	1.82	0.0E+00	M14123.1	NT	Human endogenous retrovirus HERV-K10
1387	14134	28809	1.38	0.0E+00	AJ250014.1	NT	Homo sapiens mRNA for Familial Cylindromatosis cyd gene
1393	14140	28817	3.39	0.0E+00	AJ277892.1	NT	Homo sapiens partial TTN gene for titin
1398	14143	28821	1.59	0.0E+00	AJ208758.1	EST_HUMAN	gq38b08.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1837427 3' similar to WP.T27A1.5 CE14213;
1397	14144	28822	13.21	0.0E+00	6042208	NT	RAN, member RAS oncogene family/Homo sapiens RAN, member RAS oncogene family (RAN), mRNA
1406	14153	28833	5	0.0E+00	4505848	NT	Homo sapiens protein convertase subtilisin/kexin type 2 (PCSK2) mRNA
1406	14153	28834	5	0.0E+00	4505848	NT	Homo sapiens protein convertase subtilisin/kexin type 2 (PCSK2) mRNA
1408	14155	28837	4.08	0.0E+00	7705656	NT	Homo sapiens KIAA1114 protein (KIAA1114), mRNA
1408	14155	28838	4.08	0.0E+00	7705656	NT	Homo sapiens KIAA1114 protein (KIAA1114), mRNA
1410	14157	28839	4.59	0.0E+00	AJ238098.1	NT	Homo sapiens partial AF-4 gene, exons 2 to 7 and Alu repeat elements
1420	14168	28852	3.02	0.0E+00	AF038280.1	NT	Homo sapiens alpha1-oxoacyltransferase (alpha1-oxoT) gene, exon 7
1431	14178	28863	5.39	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
1431	14178	28864	5.39	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
1436	14183	28868	17.93	0.0E+00	U35637.1	NT	Human nebulin mRNA, partial cds
1436	14183	28869	17.93	0.0E+00	U35637.1	NT	Human nebulin mRNA, partial cds
1448	14193	28876	2.59	0.0E+00	AL132899.1	NT	Novel human gene on chromosome 20
1447	14194	28877	1.82	0.0E+00	AL137784.1	NT	Novel human gene mapping to chromosome 1
1451	14198	28882	1.73	0.0E+00	D87077.1	NT	Human mRNA for KIAA0240 gene, partial cds
1454	14201	28885	4.53	0.0E+00	6912457	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
1458	14203	28887	1.55	0.0E+00	7681985	NT	Homo sapiens KIAA0170 gene product (KIAA0170), mRNA
1458	14203	28888	1.55	0.0E+00	7681985	NT	Homo sapiens KIAA0170 gene product (KIAA0170), mRNA
1458	14203	28888	1.55	0.0E+00	7681985	NT	Homo sapiens KIAA0170 gene product (KIAA0170), mRNA
1460	14207	28893	0.97	0.0E+00	M60676.1	NT	Human von Willebrand factor pseudogene corresponding to exons 23 through 34
1460	14207	28894	0.97	0.0E+00	M60676.1	NT	Human von Willebrand factor pseudogene corresponding to exons 23 through 34
1500	14246	28932	1.37	0.0E+00	7708434	NT	Homo sapiens HHDC for homolog of Drosophila headcase (LOC51898), mRNA
1516	14263	28949	1.21	0.0E+00	AW059887.1	EST_HUMAN	EST371757 MAGE resequences, MAGF Homo sapiens cDNA
1517	14264	28950	1.76	0.0E+00	AA461172.1	EST_HUMAN	es34s03.r1 NCJ_CQAP_GCB1 Homo sapiens cDNA clone IMAGE:815116 5'
1522	14269	28953	49.82	0.0E+00	AF028880.1	NT	Cercopithecus aethiops cyclophilin A mRNA, complete cds

Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1522	14269	26954	49.82	0.0E+00	AF023800.1	NT	Carotidifecus aethiops cyclophilin A mRNA, complete cds
1524	14271	26957	1.24	0.0E+00	AW976097.1	EST_HUMAN	EST388206 MAGI resequences, MAGN Homo sapiens cDNA
1524	14271	26958	1.24	0.0E+00	AW976097.1	EST_HUMAN	EST388206 MAGI resequences, MAGN Homo sapiens cDNA
1525	14272	26959	5.49	0.0E+00	D10884.1	NT	Bovine mRNA for neurocalcin
1527	14274		2.07	0.0E+00	U78027.1	NT	Homo sapiens Bruton's tyrosine kinase (BTK), alpha-D-galactosidase A (GLA), L44-like ribosomal protein (L44L) and FTP3 (FTP3) genes, complete cds
1528	14275	26962	2.1	0.0E+00	4505404	NT	Homo sapiens transmembrane glycoprotein (GPNMB) mRNA
1528	14275	26963	2.1	0.0E+00	4505404	NT	Homo sapiens transmembrane glycoprotein (GPNMB) mRNA
1530	14277	26965	3.3	0.0E+00	7662405	NT	Homo sapiens KIAA0957 protein (KIAA0957), mRNA
1531	14278		7.28	0.0E+00	7656972	NT	Homo sapiens TNF-inducible protein CG12-1 (CG12-1), mRNA
1537	14284	26971	1.84	0.0E+00	M98478.1	NT	Human transglutaminase mRNA, complete cds
1540	14287	26973	3.72	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
1540	14287	26974	3.72	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
1541	15572		11.72	0.0E+00	M14196.1	NT	Homo sapiens ribosomal protein L5 (RPL5) mRNA
1542	14288	26975	11.72	0.0E+00	4507720	NT	Human laminin receptor (2H6 epitope) mRNA, 5' end
1553	14300	26988	2.86	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
1553	14300	26989	2.86	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
1555	14302	26990	11.7	0.0E+00	4503088	NT	Homo sapiens chondroitin sulfate proteoglycan 4 (melanoma-associated) (CSPG4), mRNA
1563	14310		1.21	0.0E+00	D00333.1	NT	human c-yes-2 gene
1574	14321	27007	1.65	0.0E+00	Z63738.1	NT	H. sapiens HH2B/e gene
1575	14322	27008	1.59	0.0E+00	5921460	NT	Homo sapiens butyrophilin, subfamily 2, member A1 (BTN2A1), mRNA
1575	14322	27009	1.59	0.0E+00	5921460	NT	Homo sapiens butyrophilin, subfamily 2, member A1 (BTN2A1), mRNA
1576	14323	27010	11.18	0.0E+00	AV690831.1	EST_HUMAN	AV690831 GKC Homo sapiens cDNA clone GKCB0F02 5'
1576	14323	27011	11.18	0.0E+00	AV690831.1	EST_HUMAN	AV690831 GKC Homo sapiens cDNA clone GKCB0F02 5'
1579	15573	27014	9.85	0.0E+00	AB040905.1	NT	Homo sapiens mRNA for KIAA1472 protein, partial cds
1583	14328	27016	1.63	0.0E+00	AF157476.1	NT	Homo sapiens DNA polymerase beta catalytic subunit (REV3) mRNA, complete cds
1585	14331	27018	9.78	0.0E+00	7662183	NT	Homo sapiens KIAA0569 gene product (KIAA0569), mRNA
1585	14331	27019	9.78	0.0E+00	7662183	NT	Homo sapiens KIAA0569 gene product (KIAA0569), mRNA
1587	14333	27020	42.75	0.0E+00	5729876	NT	Homo sapiens heat shock 70KD protein 10 (HSC71) (HSPA10), mRNA
1587	14333	27021	42.75	0.0E+00	5729876	NT	Homo sapiens heat shock 70KD protein 10 (HSC71) (HSPA10), mRNA
1589	14335	27023	7.94	0.0E+00	M91803.1	NT	Human sodium channel mRNA
1604	14360	27039	6.85	0.0E+00	H26973.1	EST_HUMAN	y076c05.a1 Soares adult brain N2b4IB55Y Homo sapiens cDNA clone IMAGE:163848 3'
1614	14361	27051	2	0.0E+00	AB046828.1	NT	Homo sapiens mRNA for KIAA1609 protein, partial cds
1614	14361	27052	2	0.0E+00	AB046828.1	NT	Homo sapiens mRNA for KIAA1609 protein, partial cds



Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1659	14405	27095	1.25	0.0E+00	BE144364.1	EST_HUMAN	MRO-HT0168-191199-004-b11 HT0168 Homo sapiens cDNA
1659	14405	27096	1.25	0.0E+00	BE144364.1	EST_HUMAN	MRO-HT0168-191199-004-b11 HT0168 Homo sapiens cDNA
1663	14409	27100	1.88	0.0E+00	AI768104.1	EST_HUMAN	wg81b07.x1 Soares_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:2371477 3' similar to TR:Q62788 Q62788 CYS2/HIS2 ZINC FINGER PROTEIN.;
1664	14410	27101	1.2	0.0E+00	4758513	NT	Homo sapiens hematoopoietic-derived zinc finger protein (HD-ZNF1) mRNA
1665	14411	27102	2.61	0.0E+00	AF057177.1	NT	Homo sapiens T-cell receptor gamma V1 gene region
1669	14414	27108	1.76	0.0E+00	M29590.1	NT	Human zinc-finger protein 7 (ZFP7) mRNA, complete cds
1669	14414	27107	1.76	0.0E+00	M29590.1	NT	Human zinc-finger protein 7 (ZFP7) mRNA, complete cds
1671	14416	27109	1.35	0.0E+00	4557887	NT	Homo sapiens keratin 18 (KRT18) mRNA
1672	14417	27110	1.6	0.0E+00	7857066	NT	Homo sapiens v-ets avian erythroblastosis virus E26 oncogene related (ERG), mRNA
1675	14420	27113	1.12	0.0E+00	BE222374.1	EST_HUMAN	hul11005.x1 NCL CGAP Lu24 Homo sapiens cDNA clone IMAGE:3168281 3' similar to TR:O95147 O95147 MKP-1 LIKE PROTEIN TYROSINE PHOSPHATASE;
1675	14420	27114	1.12	0.0E+00	BE222374.1	EST_HUMAN	hul11005.x1 NCL CGAP Lu24 Homo sapiens cDNA clone IMAGE:3168281 3' similar to TR:O95147 O95147 MKP-1 LIKE PROTEIN TYROSINE PHOSPHATASE;
1677	14421	27116	3.24	0.0E+00	4557810	NT	Homo sapiens gamma-aminobutyric acid (GABA) A receptor, gamma 2 (GABRG2) mRNA
1680	14424	27119	3.18	0.0E+00	H30132.1	EST_HUMAN	yc59e08.r1 Soares breast 3N4Hb1 Homo sapiens cDNA clone IMAGE:182246 5' similar to gb:M64099 GAMMA-GLUTAMYLTRANSEPTIDASE 5 PRECURSOR (HUMAN);
1680	14424	27120	3.18	0.0E+00	H30132.1	EST_HUMAN	yc59e08.r1 Soares breast 3N4Hb1 Homo sapiens cDNA clone IMAGE:182246 5' similar to gb:M64099 GAMMA-GLUTAMYLTRANSEPTIDASE 5 PRECURSOR (HUMAN);
1682	14426	27122	1.32	0.0E+00	Z80780.1	NT	H. sapiens H2B/h gene
1682	14426	27123	1.32	0.0E+00	Z80780.1	NT	H. sapiens H2B/h gene
1685	14429	27125	13.71	0.0E+00	5031748	NT	Homo sapiens high-mobility group (nonhistone chromosomal) protein 17 (HMG17), mRNA
1693	14437	27133	1.11	0.0E+00	AF169063.1	NT	Homo sapiens WNT16 protein (WNT16) mRNA, complete cds
1695	14438	27136	3.53	0.0E+00	8923841	NT	Homo sapiens FOXJ2 forkhead factor (LOC55810), mRNA
1702	14445	27145	1.11	0.0E+00	4828973	NT	Homo sapiens RNA binding motif protein, Y chromosome, family 1, member A1 (RBM1A1) mRNA
1708	14451	27152	4.08	0.0E+00	AB028542.1	NT	Homo sapiens WAVE2 mRNA for WASP-family protein, complete cds
1710	14453	27157	2.19	0.0E+00	S94400.1	NT	TGR zeta [human, Genomic] mRNA, 365 nt, segment 1 of 8
1725	15577	27167	1.16	0.0E+00	11545911	NT	Homo sapiens NOD2 protein (NOD2), mRNA
1739	14481	27181	1.93	0.0E+00	AF273841.1	NT	Homo sapiens SMCY (SMCY) gene, complete cds
1778	15576	27228	6.86	0.0E+00	4506718	NT	Homo sapiens ribosomal protein S2 (RPS2) mRNA
1782	14523	27228	3.37	0.0E+00	4557856	NT	Homo sapiens E1A binding protein p300 (EP300) mRNA
1782	14523	27229	3.37	0.0E+00	4557856	NT	Homo sapiens E1A binding protein p300 (EP300) mRNA
1784	14525	27232	1.42	0.0E+00	U63963.1	NT	Human CSF-1 receptor (FMS) gene, complete cds, and (SMF) gene, partial cds
1787	14528		1.2	0.0E+00	W76571.1	EST_HUMAN	zdf6509.r1 Soares_fetal_heart_NbHH19W Homo sapiens cDNA clone IMAGE:345694 5'

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1788	15579	27238	2.74	0.0E+00	4505332	NT	Homo sapiens nuclear autoantigenic sperm protein (histone-binding) (NASP) mRNA
1800	14540	27251	5.68	0.0E+00	U14967.1	NT	Human ribosomal protein L21 mRNA, complete cds
1802	14542	27254	2.79	0.0E+00	AB002331.1	NT	Human mRNA for KIAA0333 gene, partial cds
1803	14543	27255	4.07	0.0E+00	4502284	NT	Homo sapiens activating transcription factor 4 (tax-responsive enhancer element B67) (ATF4) mRNA
1803	14543	27256	4.07	0.0E+00	4502284	NT	Homo sapiens activating transcription factor 4 (tax-responsive enhancer element B67) (ATF4) mRNA
1803	14543	27257	4.07	0.0E+00	4502284	NT	Homo sapiens activating transcription factor 4 (tax-responsive enhancer element B67) (ATF4) mRNA
1812	14552	27266	1.63	0.0E+00	4506328	NT	Homo sapiens protein tyrosine phosphatase, receptor-type, zeta polypeptide 1 (PTPRZ1) mRNA
1826	14565	27276	5.82	0.0E+00	6005855	NT	Homo sapiens Retina-derived POU-domain factor-1 (RPF-1), mRNA
1826	14565	27277	5.82	0.0E+00	6005855	NT	Homo sapiens Retina-derived POU-domain factor-1 (RPF-1), mRNA
1836	14575	27287	1.12	0.0E+00	AB032978.1	NT	Homo sapiens mRNA for KIAA1152 protein, partial cds
1836	14575	27288	1.12	0.0E+00	AB032978.1	NT	Homo sapiens mRNA for KIAA1152 protein, partial cds
1840	14578	27290	4.35	0.0E+00	4826783	NT	Homo sapiens potassium voltage-gated channel, Shab-related subfamily, member 1 (KCNB1) mRNA
1840	14578	27291	4.35	0.0E+00	4826783	NT	Homo sapiens potassium voltage-gated channel, Shab-related subfamily, member 1 (KCNB1) mRNA
1841	14579	27292	5.47	0.0E+00	U07147.1	NT	Human retinal degeneration slow (RDS) gene, exon 1
1841	14579	27293	5.47	0.0E+00	U07147.1	NT	Human retinal degeneration slow (RDS) gene, exon 1
1844	14582	27298	1.46	0.0E+00	AW207280.1	EST_HUMAN	UI-H-B11-afn-f-07-Q-J1.s1 NCL_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2722333 3'
1844	14582	27297	1.46	0.0E+00	AW207280.1	EST_HUMAN	UI-H-B11-afn-f-07-Q-J1.s1 NCL_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2722333 3'
1868	14608	27316	3.49	0.0E+00	BE277465.1	EST_HUMAN	601179184F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3547239 5'
1868	14608	27317	3.49	0.0E+00	BE277465.1	EST_HUMAN	601179184F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3547239 5'
1887	14624	27334	0.93	0.0E+00	BE006292.1	EST_HUMAN	RG2-BN0128-200300-012-504 BN0128 Homo sapiens cDNA
1916	14653	27362	2.16	0.0E+00	4506384	NT	Homo sapiens RAD1 (S. pombe) homolog (RAD1) mRNA, and translated products
1916	14653	27363	2.16	0.0E+00	4506384	NT	Homo sapiens RAD1 (S. pombe) homolog (RAD1) mRNA, and translated products
1924	14661		1.22	0.0E+00	AF157476.1	NT	Homo sapiens DNA polymerase zeta catalytic subunit (REV3) mRNA, complete cds
1925	15582	27372	1.19	0.0E+00	M98478.1	NT	Human transglutaminase mRNA, complete cds
1925	15582	27373	1.19	0.0E+00	M98478.1	NT	Human transglutaminase mRNA, complete cds
1925	14666	27380	1.53	0.0E+00	4507404	NT	Homo sapiens transforming growth factor, beta 3 (TGFB3), mRNA
1930	14666	27381	1.53	0.0E+00	4507404	NT	Homo sapiens transforming growth factor, beta 3 (TGFB3), mRNA
1933	14668	27383	1.42	0.0E+00	7657038	NT	Homo sapiens death receptor 6 (DR6), mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1935	14870		4.27	0.0E+00	AF240786.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
1940	14875		1.35	0.0E+00	M55632.1	NT	Human lipodermase   pseudogene 1
1949	14884	27398	1.94	0.0E+00	4809282	NT	Homo sapiens histidine aminotransferase (HAL) mRNA
1949	14884	27397	1.94	0.0E+00	4809282	NT	Homo sapiens histidine aminotransferase (HAL) mRNA
1959	14895		1.15	0.0E+00	AL163252.2	NT	Homo sapiens chromosome 21 segment HS21G052
1961	14897	27410	1.09	0.0E+00	8400716	NT	Homo sapiens nebulin (NEB), mRNA
1961	14897	27411	1.09	0.0E+00	8400716	NT	Homo sapiens nebulin (NEB), mRNA
1962	14898	27412	2.49	0.0E+00	4826638	NT	Homo sapiens actinin, alpha 4 (ACTN4) mRNA
1962	14898	27413	2.49	0.0E+00	4826638	NT	Homo sapiens actinin, alpha 4 (ACTN4) mRNA
1973	14709	27427	1.36	0.0E+00	AB018333.1	NT	Homo sapiens mRNA for KIAA0760 protein, partial cds
1973	14709	27428	1.36	0.0E+00	AB018333.1	NT	Homo sapiens mRNA for KIAA0760 protein, partial cds
1979	14715	27432	1.69	0.0E+00	M33782.1	NT	Human TEB protein mRNA, partial cds
1979	14715	27433	1.69	0.0E+00	M33782.1	NT	Human TEB protein mRNA, partial cds
1981	14717	27434	1.57	0.0E+00	AW183024.1	EST_HUMAN	X68601.x1 NCI_GGAP_Pan1 Homo sapiens cDNA clone IMAGE:2679813 3'
1981	14717	27435	1.57	0.0E+00	AW183024.1	EST_HUMAN	X68601.x1 NCI_GGAP_Pan1 Homo sapiens cDNA clone IMAGE:2679813 3'
1982	14718	27436	5.98	0.0E+00	8912457	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
1982	14718	27437	5.98	0.0E+00	8912457	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
1984	14720	27439	2	0.0E+00	7662096	NT	Homo sapiens KIAA0408 gene product (KIAA0408), mRNA
1985	14721	27440	1.19	0.0E+00	AB011149.1	NT	Homo sapiens mRNA for KIAA0577 protein, complete cds
1988	14722	27441	1.58	0.0E+00	Z47556.1	NT	H. sapiens genes for semenogelin I and semenogelin II
1988	14722	27442	1.58	0.0E+00	Z47556.1	NT	H. sapiens genes for semenogelin I and semenogelin II
1989	14729	27451	3.75	0.0E+00	AB040946.1	NT	Homo sapiens mRNA for KIAA1513 protein, partial cds
1989	14729	27451	3.75	0.0E+00	AB040946.1	NT	Homo sapiens SMCY (SMCY) gene, complete cds
2014	14749	27476	1.02	0.0E+00	AF273841.1	NT	Homo sapiens SMCY (SMCY) gene, complete cds
2014	14749	27477	1.02	0.0E+00	AF273841.1	NT	Homo sapiens SMCY (SMCY) gene, complete cds
2046	14779	27507	1.84	0.0E+00	7706742	NT	Homo sapiens TP53TG3a (TP53TG3a), mRNA
2052	14785	27511	4.13	0.0E+00	AU140831.1	EST_HUMAN	AU140831 PLACE4 Homo sapiens cDNA clone PLACE4000321 5'
2053	14155	26837	1.55	0.0E+00	7705595	NT	Homo sapiens KIAA1114 protein (KIAA1114), mRNA
2053	14155	26838	1.55	0.0E+00	7705595	NT	Homo sapiens KIAA1114 protein (KIAA1114), mRNA
2055	14787	27513	2.04	0.0E+00	AA077589.1	EST_HUMAN	7B22E10 Chromosome 7 Fetal Brain cDNA Library Homo sapiens cDNA clone 7B22E10
2055	14787	27513	2.04	0.0E+00	AA077589.1	EST_HUMAN	7B22E10 Chromosome 7 Fetal Brain cDNA Library Homo sapiens cDNA clone 7B22E10
2055	14787	27514	2.04	0.0E+00	AA077589.1	EST_HUMAN	7B22E10 Chromosome 7 Fetal Brain cDNA Library Homo sapiens cDNA clone 7B22E10
2057	14789		2.41	0.0E+00	7657468	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
2059	14791		1.91	0.0E+00	4585863	NT	Homo sapiens phosphodiesterase 6A, cGMP-specific, rod, alpha (PDE6A), mRNA
2060	14792	27517	0.97	0.0E+00	Z42399.1	EST_HUMAN	HSC01C021 normalized infant brain cDNA Homo sapiens cDNA clone c-0c02

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## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2062	14794		1.78	0.0E+00	AI244247.1	EST_HUMAN	q96088.x1 NCI_CGAP_U12 Homo sapiens cDNA clone IMAGE:1988871 3' similar to contains Alu repetitive element;
2067	14799	27526	3.48	0.0E+00	BE877225.1	EST_HUMAN	601485148F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3887747 5'
2069	14801	27528	1.48	0.0E+00	BF316325.1	EST_HUMAN	601902804F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4135320 5'
2069	14801	27528	1.48	0.0E+00	BF315325.1	EST_HUMAN	601902804F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4135320 5'
2072	14804	27532	3.07	0.0E+00	BE697125.1	EST_HUMAN	RC3-CT0413-270700-022-410 CT0413 Homo sapiens cDNA
2072	14804	27533	3.07	0.0E+00	BE697125.1	EST_HUMAN	RC3-CT0413-270700-022-410 CT0413 Homo sapiens cDNA
2080	14812	27544	3.71	0.0E+00	L00620.1	NT	Human plasma membrane calcium ATPase isoform 2 (APT2B2) mRNA, complete cds
2080	14812	27545	3.71	0.0E+00	L00620.1	NT	Human plasma membrane calcium ATPase isoform 2 (APT2B2) mRNA, complete cds
2085	14817	27549	1.36	0.0E+00	4768489	NT	Homo sapiens GTP binding protein 1 (GTPBP1) mRNA
2107	14838		2.06	0.0E+00	BE767994.1	EST_HUMAN	QV1-GN0065-140800-318-c10 GN0065 Homo sapiens cDNA
2108	14839		1.59	0.0E+00	AF018903.1	NT	Homo sapiens X-linked juvenile retinoschisis protein (XLRST) gene, exon 6 and complete cds
2110	14841	27672	3.76	0.0E+00	BF027662.1	EST_HUMAN	601872068F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3964785 5'
2111	14842	27573	1.03	0.0E+00	BE072624.1	EST_HUMAN	PMO-BT0547-210300-004-F04 BT0547 Homo sapiens cDNA
2113	14844	27574	1.06	0.0E+00	AF240788.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
2116	14847	27576	1.3	0.0E+00	AW752708.1	EST_HUMAN	IL3-CT0219-271099-022-G10 CT0219 Homo sapiens cDNA
2117	14848	27577	1.47	0.0E+00	L79627.1	NT	Homo sapiens metabotropic glutamate receptor 1 alpha (mGluR1alpha) mRNA, complete cds
2119	14850	27579	6.39	0.0E+00	A1904640.1	EST_HUMAN	QV-BT0655-020398-092 BT0655 Homo sapiens cDNA
2119	14850	27580	6.39	0.0E+00	A1904640.1	EST_HUMAN	QV-BT0655-020398-092 BT0655 Homo sapiens cDNA
2163	14883		1.05	0.0E+00	7857252	NT	Homo sapiens potassium large conductance calcium-activated channel, subfamily M, beta member 3-like (KCNNM3L), mRNA
2179	14908		1.22	0.0E+00	L14787.1	NT	Human DNA-binding protein mRNA, 3' end
2183	14912	27844	1.05	0.0E+00	BE274098.1	EST_HUMAN	601122338F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3346688 5'
2185	14914	27847	7.59	0.0E+00	AV738288.1	EST_HUMAN	AV738288 CB Homo sapiens cDNA clone CBNBDE08 5'
2185	14914	27848	7.59	0.0E+00	AV738288.1	EST_HUMAN	AV738288 CB Homo sapiens cDNA clone CBNBDE08 5'
2187	14916	27850	1.4	0.0E+00	AA931891.1	EST_HUMAN	cc32a01.s1 NCI_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1567898 3'
2191	14920	27854	5.08	0.0E+00	BF344434.1	EST_HUMAN	602014829F1 NCI_CGAP_Bm64 Homo sapiens cDNA clone IMAGE:4150734 5'
2192	14921	27855	12.14	0.0E+00	BE748600.1	EST_HUMAN	601572186T1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:3839012 3'
2198	14925	27859	3.55	0.0E+00	BF377987.1	EST_HUMAN	CM1-TN0141-250800-439-b08 TN0141 Homo sapiens cDNA
2198	14925	27860	3.55	0.0E+00	BF377987.1	EST_HUMAN	CM1-TN0141-250800-439-b08 TN0141 Homo sapiens cDNA
2200	15588	27865	2.04	0.0E+00	BF13617.1	EST_HUMAN	601900261F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4126622 5'
2203	14931	27868	1.93	0.0E+00	BE018750.1	EST_HUMAN	b684e02.y1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3049082 5' similar to TR:Q15170 Q15170 TRANSCRIPTION FACTOR S-II-RELATED PROTEIN ;

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2204	14932	27669	1.55	0.0E+00	AA042813.1	EST_HUMAN	zk63c07.s1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:486540 3' similar to gb:X68857_cds1 OLFACTORY RECEPTOR-LIKE PROTEIN HGMP07E (HUMAN);
2204	14932	27670	1.55	0.0E+00	AA042813.1	EST_HUMAN	zk63c07.s1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:486540 3' similar to gb:X68857_cds1 OLFACTORY RECEPTOR-LIKE PROTEIN HGMP07E (HUMAN);
2212	14940	27678	3.37	0.0E+00	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
2212	14940	27679	3.37	0.0E+00	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
2213	14941	27680	2.3	0.0E+00	7662401	NT	Homo sapiens KIAA0952 protein (KIAA0952), mRNA
2213	14941	27681	2.3	0.0E+00	7662401	NT	Homo sapiens KIAA0952 protein (KIAA0952), mRNA
2218	14946		1.37	0.0E+00	U36284.1	NT	Human beta-prime-adaptin (BAM22) gene, exon 16
2236	14964	27704	5.71	0.0E+00	4557556	NT	Homo sapiens E1A binding protein p300 (EP300) mRNA
2243	14971	27709	2.03	0.0E+00	7662401	NT	Homo sapiens KIAA0952 protein (KIAA0952), mRNA
2250	14978	27717	1.71	0.0E+00	BE965281.1	EST_HUMAN	801433525F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3918607 5'
2253	14981	27720	1.27	0.0E+00	BE905563.1	EST_HUMAN	801495208F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3897457 5'
2253	14981	27721	1.27	0.0E+00	BE905563.1	EST_HUMAN	801495208F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3897457 5'
2258	14983	27723	2.35	0.0E+00	AB037784.1	NT	Homo sapiens mRNA for KIAA1363 protein, partial cds
2259	15024	27759	4.02	0.0E+00	11545748	NT	Homo sapiens differentially expressed in FDCP (mouse homolog) 8 (DEF6), mRNA
2290	15024	27760	4.02	0.0E+00	11545748	NT	Homo sapiens differentially expressed in FDCP (mouse homolog) 8 (DEF6), mRNA
2300	15025	27761	1.87	0.0E+00	AI076404.1	EST_HUMAN	cd09c07.x1 Soares_fetal_liver_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:1874828 3'
2302	15027	27763	2.33	0.0E+00	AA429001.1	EST_HUMAN	zv78a11.1 Soares_fetal_liver_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:759740 5'
2302	15027	27764	2.33	0.0E+00	AA429001.1	EST_HUMAN	zv78a11.1 Soares_fetal_liver_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:759740 5'
2304	15029	27766	1.75	0.0E+00	BF347036.1	EST_HUMAN	802021846F1 NCI_CGAP_Bm87 Homo sapiens cDNA clone IMAGE:4157339 5'
2309	15034	27772	1.52	0.0E+00	L02840.1	NT	Homo sapiens potassium channel Kv2.1 mRNA, complete cds
2310	15035	27773	1.61	0.0E+00	AB020717.1	NT	Homo sapiens mRNA for KIAA0910 protein, partial cds
2310	15035	27774	1.61	0.0E+00	AB020717.1	NT	Homo sapiens mRNA for KIAA0910 protein, partial cds
2311	15036	27776	1.39	0.0E+00	6325468	NT	Homo sapiens flavin containing monooxygenase 3 (FMO3), mRNA
2317	15042	27780	1.17	0.0E+00	BE678095.1	EST_HUMAN	7622402.x1 NCI_CGAP_GLL1 Homo sapiens cDNA clone IMAGE:3285370 3' similar to TR:094839 094839 KIAA0957 PROTEIN ;
2320	15045	27782	4.73	0.0E+00	AF044571.1	NT	Homo sapiens phosphatase kinase alpha subunit (PHKA2) gene, exon 32
2321	15046	27783	1.9	0.0E+00	AI625542.1	EST_HUMAN	557c08.x1 NCI_CGAP_U12 Homo sapiens cDNA clone IMAGE:2283182 3'
2325	15050	27785	1.88	0.0E+00	7662401	NT	Homo sapiens KIAA0952 protein (KIAA0952), mRNA
2325	15050	27786	1.88	0.0E+00	7662401	NT	Homo sapiens KIAA0952 protein (KIAA0952), mRNA
2328	15053	27789	1.95	0.0E+00	5803178	NT	Homo sapiens sperm specific antigen 2 (SSFA2), mRNA
2328	15053	27790	1.95	0.0E+00	5803178	NT	Homo sapiens sperm specific antigen 2 (SSFA2), mRNA
2334	15058	27793	1.24	0.0E+00	7662007	NT	Homo sapiens KIAA0218 gene product (KIAA0218), mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2334	15058	27794	1.24	0.0E+00	7862007	NT	Homo sapiens KIAA0218 gene product (KIAA0218), mRNA
2348	15071	27807	3.2	0.0E+00	5174678	NT	Homo sapiens signal regulatory protein, beta, 1 (SIRP-BETA-1) mRNA
2352	15074	27811	2.39	0.0E+00	AU131142.1	EST_HUMAN	AU131142 NT2RP3 Homo sapiens cDNA clone NT2RP3002084 5'
2353	15075		4.31	0.0E+00	BE794026.1	EST_HUMAN	601589843F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3841003 5'
2354	15076	27812	1.51	0.0E+00	AW867076.1	EST_HUMAN	MR1-SN0033-120400-002-004 SN0033 Homo sapiens cDNA
2355	15077	27813	2.99	0.0E+00	7862017	NT	Homo sapiens KIAA0244 protein (KIAA0244), mRNA
2356	15078	27814	2.03	0.0E+00	4758497	NT	Homo sapiens hexose-6-phosphate dehydrogenase (glucose 1-dehydrogenase) (H6PD), mRNA
2358	15078	27815	2.03	0.0E+00	4758497	NT	Homo sapiens hexose-6-phosphate dehydrogenase (glucose 1-dehydrogenase) (H6PD), mRNA
							Homo sapiens cytochrome P450 polypeptide 43 (CYP3A43) gene, partial cds; cytochrome P450 polypeptide 4 (CYP3A4) and cytochrome P450 polypeptide 7 (CYP3A7) genes, complete cds; and cytochrome P450 polypeptide 5 (CYP3A5) gene, partial cds
2357	15079		5.25	0.0E+00	AF280107.1	NT	4 (CYP3A4) and cytochrome P450 polypeptide 43 (CYP3A43) gene, partial cds
2359	15081	27817	7.98	0.0E+00	AU118082.1	EST_HUMAN	AU118082 HEMBA1 Homo sapiens cDNA clone HEMBA1002839 5'
2360	15081	27818	7.98	0.0E+00	AU118082.1	EST_HUMAN	AU118082 HEMBA1 Homo sapiens cDNA clone HEMBA1002839 5'
2359	15081	27819	7.98	0.0E+00	AU118082.1	EST_HUMAN	AU118082 HEMBA1 Homo sapiens cDNA clone HEMBA1002839 5'
2360	15082	27820	0.98	0.0E+00	8823089	NT	Homo sapiens hypothetical protein FLJ20081 (FLJ20081), mRNA
2377	15089		0.91	0.0E+00	BE614424.1	EST_HUMAN	MR0-BN0070-090600-029-d12 BN0070 Homo sapiens cDNA
2415	15136	27872	1.06	0.0E+00	AU118082.1	EST_HUMAN	AU118082 HEMBA1 Homo sapiens cDNA clone HEMBA1008155 5'
2416	15137		3.74	0.0E+00	A1042035.1	EST_HUMAN	ox00b02x1 Source_NHIMPu_S1 Homo sapiens cDNA clone IMAGE:1860683 3' similar to TR:008062
2417	15138	27873	0.98	0.0E+00	8823620	NT	O08062 230KDA PHOSPHATIDYLINOSITOL 4-KINASE
2420	15141		4.44	0.0E+00	BE806805.1	EST_HUMAN	Homo sapiens hypothetical protein FLJ20893 (FLJ20893), mRNA
2424	15145	27878	1	0.0E+00	BE937632.1	EST_HUMAN	601432808F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3918188 5'
2433	15154		0.98	0.0E+00	AB008622.1	EST_HUMAN	MR1-TN0021-280800-001-h08 TN0021 Homo sapiens cDNA
2437	15157	27892	4.5	0.0E+00	6008002	NT	AB005622 HeLa cDNA (T.None) Homo sapiens cDNA similar to adenylylate kinase isozyme 2
2441	15160	27896	2.09	0.0E+00	D85806.1	NT	Homo sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 2A (GRIN2A) mRNA
2441	15160	27897	2.09	0.0E+00	D85806.1	NT	Homo sapiens gene for cholecystikinin type-A receptor, complete cds
2449	15168	27906	1.91	0.0E+00	AF106276.1	NT	Homo sapiens gene for cholecystikinin type-A receptor, complete cds
2454	15172	27911	1.22	0.0E+00	BF345274.1	EST_HUMAN	Homo sapiens immunoglobulin-like transcript 1c variant 4 (ILT1c) gene, exon 6
2461	15179	27919	4.45	0.0E+00	5728777	NT	602018068F1 NCI_CGAP_Bim67 Homo sapiens cDNA clone IMAGE:4163670 5'
2465	15183	27922	1.24	0.0E+00	BE831003.1	EST_HUMAN	Homo sapiens calgran, type XII, alpha 1 (COL12A1), mRNA
2465	15183	27923	1.24	0.0E+00	BE831003.1	EST_HUMAN	CMD-MT0033-150800-428-h11 MT0033 Homo sapiens cDNA
2470	15188	27927	0.93	0.0E+00	U13686.1	NT	CMD-MT0033-150800-428-h11 MT0033 Homo sapiens cDNA
2470	15188	27928	0.93	0.0E+00	U13686.1	NT	Human G protein-coupled receptor (GPR1) gene, complete cds
2471	15189	27929	2.98	0.0E+00	BF589144.1	EST_HUMAN	Human G protein-coupled receptor (GPR1) gene, complete cds
							802184558T1 NIH_MGC_42 Homo sapiens cDNA clone IMAGE:4300383 3'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2618	15329	28072	2.08	0.0E+00	AI571737.1	EST_HUMAN	tn1808.x1 NCI_OGAP_Bm25 Homo sapiens cDNA clone IMAGE:2168055 3' similar to gbL20977 CALCIUM-TRANSPORTING ATPASE PLASMA MEMBRANE, BRAIN ISOFORM 2 (HUMAN); Homo sapiens TATA box binding protein (TBP)-associated factor, RNA polymerase II, 1, 28kD (TAF2i)
2619	15330	28073	2.19	0.0E+00	5032150	NT	mRNA
2621	15333	28077	4.95	0.0E+00	AB037859.1	NT	Homo sapiens mRNA for KIAA1438 protein, partial cds
2622	15334	28078	1.02	0.0E+00	BE785445.1	EST_HUMAN	601860108F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3944304 5'
2622	15334	28079	1.02	0.0E+00	BE785445.1	EST_HUMAN	601860108F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3944304 5'
2625	15337	28080	2.55	0.0E+00	BE263328.1	EST_HUMAN	601143722F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:3051389 5'
2632	15344		4.92	0.0E+00	BE792472.1	EST_HUMAN	601984930F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3938222 5'
2641	15352	28098	1.51	0.0E+00	4504686	NT	Homo sapiens IMP (inosine monophosphate) dehydrogenase 1 (IMPDH1) mRNA Homo sapiens Bruton's tyrosine kinase (BTK), alpha-D-galactosidase A (GLA), L44-like ribosomal protein (L44L) and FTP3 (FTP3) genes, complete cds
2651	15361		1.27	0.0E+00	U78027.1	NT	Homo sapiens guanylate cyclase-activating protein 2 (GUCA1B) gene, exon 1
2652	15362	28103	6.55	0.0E+00	AF173227.1	NT	Homo sapiens guanylate cyclase-activating protein 2 (GUCA1B) gene, exon 1
2658	15368	28106	1.22	0.0E+00	AU133385.1	EST_HUMAN	AU133385 NT2RP4 Homo sapiens cDNA clone NT2RP4001964 5'
2659	15369	28107	1.08	0.0E+00	M59225.1	NT	Human bulbus penicillid antigen (BPAG1) mRNA, complete cds
2661	15371	28109	2.22	0.0E+00	AU130403.1	EST_HUMAN	AU130403 NT2RP3 Homo sapiens cDNA clone NT2RP3000779 5'
2661	15371	28110	2.22	0.0E+00	AU130403.1	EST_HUMAN	AU130403 NT2RP3 Homo sapiens cDNA clone NT2RP3000779 5'
2663	15373	28112	1.71	0.0E+00	AW887015.1	EST_HUMAN	RC1-OT0086-220300-011-407 OT0086 Homo sapiens cDNA
2668	15376	28115	1.26	0.0E+00	BF000018.1	EST_HUMAN	7h15h05.x1 NCI_OGAP_Co18 Homo sapiens cDNA clone IMAGE:3316089 3'
2667	15377	28116	4.37	0.0E+00	BE383165.1	EST_HUMAN	601298714F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3628923 5'
2668	15378		2.57	0.0E+00	BE531263.1	EST_HUMAN	601276373F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3610267 5'
2726	15432		4.21	0.0E+00	AA316728.1	EST_HUMAN	EST188414 HCC cell line (metastasis to liver in mouse) II Homo sapiens cDNA 5' end similar to ribosomal protein L29
2726	15433	28169	5.57	0.0E+00	BE794884.1	EST_HUMAN	601689825F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3943591 5'
2732	15439	28177	3.83	0.0E+00	U36253.1	NT	Human beta-prime-adaptin (BAM22) gene, exon 5
2733	15440	28178	1.33	0.0E+00	7089517	NT	Homo sapiens neurogranin 1 (NRG1), transcript variant SMDF, mRNA
2734	15441	28179	1.78	0.0E+00	AF110783.1	NT	Homo sapiens skeletal muscle LIM-protein 1 (FHL1) gene, complete cds
2736	15443	28181	1.27	0.0E+00	AB051826.1	NT	Homo sapiens hG28K mRNA for GTP-binding protein like 1, complete cds
2742	15448	28187	7.77	0.0E+00	BE796376.1	EST_HUMAN	Homo sapiens hG28K mRNA for GTP-binding protein like 1, complete cds
2745	15604	28191	3.48	0.0E+00	BE563433.1	EST_HUMAN	601691891F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3945983 5'
2746	15451		1.16	0.0E+00	AV721647.1	EST_HUMAN	601333485F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3689504 5'
2748	15453	28194	2.25	0.0E+00	5174466	NT	AV721647 HTB Homo sapiens cDNA clone HTBBYE09 5'
2748	15463	28196	2.25	0.0E+00	5174468	NT	Homo sapiens spermatogenesis associated PD1 (KJAA0757) mRNA
2749	15464	28198	1.21	0.0E+00	8923441	NT	Homo sapiens spermatogenesis associated PD1 (KJAA0757) mRNA Homo sapiens hypothetical protein FLJ20477 (FLJ20477), mRNA



Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2749	15454	28197	1.21	0.0E+00	8923441	NT	Homo sapiens hypothetical protein FLJ20477 (FLJ20477), mRNA
2750	15455	28198	2.5	0.0E+00	AF280195.1	NT	Homo sapiens hypertension-related calcium-regulated gene mRNA, complete cds
2751	15456		13.80	0.0E+00	AV651098.1	EST_HUMAN	AV651098 GLC Homo sapiens cDNA clone GLC007 3'
2752	15457	28199	3.13	0.0E+00	BF377987.1	EST_HUMAN	CM1-TN0141-250800-439-b08 TN0141 Homo sapiens cDNA
2753	15457	28200	3.13	0.0E+00	BF377987.1	EST_HUMAN	CM1-TN0141-250800-439-b08 TN0141 Homo sapiens cDNA
2756	15461	28203	33.8	0.0E+00	4757983	NT	Homo sapiens cerebellar degeneration-related protein (34kD) (CDR1) mRNA
2756	15461	28204	33.8	0.0E+00	4757983	NT	Homo sapiens cerebellar degeneration-related protein (34kD) (CDR1) mRNA
2760	15465	28209	2.58	0.0E+00	BE747183.1	EST_HUMAN	601580903F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3928472 5'
2771	15476		1.15	0.0E+00	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
2772	15477	28219	3.36	0.0E+00	BF514110.1	EST_HUMAN	U1-HBW1-arnw-07-01.1 NCI_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3071340 3'
2778	15483		0.98	0.0E+00	4503098	NT	Homo sapiens chondroitin sulfate proteoglycan 4 (melanoma-associated) (CSPG4), mRNA
2784	15488	28227	2.1	0.0E+00	7705275	NT	Homo sapiens angiotensin-3 (ANG-3), mRNA
2784	15489	28228	2.1	0.0E+00	7705275	NT	Homo sapiens angiotensin-3 (ANG-3), mRNA
2785	15490	28228	4.97	0.0E+00	BF977694.1	EST_HUMAN	602085579F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4248915 5'
2791	15496	28237	1.75	0.0E+00	7427522	NT	Homo sapiens protein tyrosine phosphatase, receptor type, T (PTPRT), mRNA
2794	15499	28239	13.56	0.0E+00	AV725534.1	EST_HUMAN	AV725534 HTCC Homo sapiens cDNA clone HTCCCA03 5'
2794	15499	28240	13.56	0.0E+00	AV725534.1	EST_HUMAN	AV725534 HTCC Homo sapiens cDNA clone HTCCCA03 5'
2798	15501		7.61	0.0E+00	A1879163.1	EST_HUMAN	au55d04.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2518863 5' similar to SW-R13A_HUMAN P40429 60S RIBOSOMAL PROTEIN L13A ;
2799	15504	28245	5.41	0.0E+00	BF530991.1	EST_HUMAN	602071957F1 NCI_CGAP_Bim67 Homo sapiens cDNA clone IMAGE:4214679 5'
2800	15505	28246	5.55	0.0E+00	BE872768.1	EST_HUMAN	601450912F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3884842 5'
2802	15507	28247	1.6	0.0E+00	AU131494.1	EST_HUMAN	AU131494 NT2RP3 Homo sapiens cDNA clone NT2RP3002872 5'
2802	15507	28248	1.6	0.0E+00	AU131494.1	EST_HUMAN	AU131494 NT2RP3 Homo sapiens cDNA clone NT2RP3002872 5'
2803	15508	28249	20.25	0.0E+00	BE300344.1	EST_HUMAN	600844794F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:2980806 5'
2803	15508	28250	20.25	0.0E+00	BE300344.1	EST_HUMAN	600844794F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:2980806 5'
2809	12886	25634	4.22	0.0E+00	S76830.1	NT	glycoprotein D=Duffy group antigen [human, blood, Genomic DNA, 3088 nt]
2812	15515		4.35	0.0E+00	AB033281.1	NT	Homo sapiens BTROP2 mRNA for F-box and WD-repeats protein isoform C, complete cds
2818	13491	26144	8.39	0.0E+00	AF284750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
2818	13491	26145	8.39	0.0E+00	AF284750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
2822	13776	26436	3.52	0.0E+00	4503202	NT	Homo sapiens cytochrome P450, subfamily 1 (dioxin-inducible), polypeptide 1 (glaucoma 3, primary infantile) (CYP1B1) mRNA
2822	13776	26437	3.52	0.0E+00	4503202	NT	Homo sapiens cytochrome P450, subfamily 1 (dioxin-inducible), polypeptide 1 (glaucoma 3, primary infantile) (CYP1B1) mRNA
2840	15608	28258	3.52	0.0E+00	XB5980.1	NT	H. sapiens serine hydroxymethyltransferase pseudogene

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2841	15609		1.34	0.0E+00	AF068624.1	NT	Homo sapiens 5-aminolevulinic synthase 2 (ALAS2) gene, complete cds
2843	15611		1.22	0.0E+00	AB040680.1	NT	Homo sapiens mRNA for KIAA1527 protein, partial cds
2849	15617	28263	2.61	0.0E+00	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
2852	15620	28266	2.63	0.0E+00	M91803.1	NT	Human sodium channel mRNA
2854	15622	28267	1.94	0.0E+00	M80602.1	NT	Human AHNK nucleoprotein mRNA, 5' end
2857	15625	28268	1.29	0.0E+00	BE154504.1	EST_HUMAN	PIMD-HT0343-281299-003-402 HT0343 Homo sapiens cDNA
2857	15625	28270	1.29	0.0E+00	BE154504.1	EST_HUMAN	PIMD-HT0343-281299-003-402 HT0343 Homo sapiens cDNA
2859	15627		1.18	0.0E+00	XT3428.1	NT	H. sapiens lds gene for HLH type transcription factor
2860	15628		2.59	0.0E+00	AL163268.2	NT	Homo sapiens chromosome 21 segment HS21C006
2861	15629	28272	1.03	0.0E+00	7019584	NT	Homo sapiens zinc finger protein 221 (ZNF221), mRNA
2861	15629	28273	1.03	0.0E+00	7019584	NT	Homo sapiens zinc finger protein 221 (ZNF221), mRNA
2861	15629	28274	1.03	0.0E+00	7019584	NT	Homo sapiens zinc finger protein 221 (ZNF221), mRNA
2866	15633	28277	18.48	0.0E+00	D50657.1	NT	Homo sapiens gamma-cytoplasmic actin (ACTGP3) pseudogene
2866	15633	28278	18.48	0.0E+00	D50657.1	NT	Homo sapiens gamma-cytoplasmic actin (ACTGP3) pseudogene
2869	15636	28281	1.09	0.0E+00	AL090857.1	NT	Novel human mRNA from chromosome 1, which has similarities to BAT2 genes
2870	15637		7.2	0.0E+00	Y10658.1	NT	H. sapiens mRNA for nuclear DNA helicase II
2871	15638		1.42	0.0E+00	AF152303.1	NT	Homo sapiens protocadherin alpha C1 (PCDH-alpha-C1) mRNA, complete cds
2872	15639	28282	47.87	0.0E+00	4503470	NT	Homo sapiens eukaryotic translation elongation factor 1 alpha 1 (EEF1A1) mRNA
2872	15639	28283	47.87	0.0E+00	4503470	NT	Homo sapiens eukaryotic translation elongation factor 1 alpha 1 (EEF1A1) mRNA
2882	15649	28282	2.35	0.0E+00	4507280	NT	Homo sapiens serine/threonine kinase 9 (STK9) mRNA
2885	15652	28296	1.06	0.0E+00	AL047598.1	EST_HUMAN	DKFZp586G0621_1 586 (synonym: hute1) Homo sapiens cDNA clone DKFZp586G0621
2886	15653	28287	0.97	0.0E+00	7861883	NT	Homo sapiens KIAA0054 gene product; Helicase (KIAA0054), mRNA
2886	15653	28298	0.97	0.0E+00	7861883	NT	Homo sapiens KIAA0054 gene product; Helicase (KIAA0054), mRNA
2887	15654		2.96	0.0E+00	4503098	NT	Homo sapiens chondroitin sulfate proteoglycan 4 (melanoma-associated) (GSPG4), mRNA
2890	15657	28300	5.46	0.0E+00	BE081896.1	EST_HUMAN	QV2-BT0636-130400-138-H03 BT0636 Homo sapiens cDNA
2890	15657	28301	5.46	0.0E+00	BE081896.1	EST_HUMAN	QV2-BT0636-130400-138-H03 BT0636 Homo sapiens cDNA
2897	15664	28312	2.09	0.0E+00	AL163206.2	NT	Homo sapiens chromosome 21 segment HS21C006
2897	15664	28313	2.09	0.0E+00	AL163206.2	NT	Homo sapiens chromosome 21 segment HS21C006
2905	15671		4.18	0.0E+00	Y18210.1	NT	Homo sapiens Hb5 gene for hair keratin, exons 1 to 9
2907	15673	28321	1.33	0.0E+00	4768279	NT	Homo sapiens EphA4 (EPHA4) mRNA
2908	15674	28322	20.94	0.0E+00	4503470	NT	Homo sapiens eukaryotic translation elongation factor 1 alpha 1 (EEF1A1) mRNA
2909	15676	28323	1.91	0.0E+00	AI661002.1	EST_HUMAN	In18407.x1 NCL_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2167981 3' similar to TR:O16247 O16247 F44E7.2 PROTEIN. ;

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2909	15075	28324	1.91	0.0E+00	AI561002.1	EST_HUMAN	In18d07.x1 NCI_CGAP_Brm25 Homo sapiens cDNA clone IMAGE:2167981 3' similar to TR:O16247
2911	15077	28326	1.83	0.0E+00	P52740	SWISSPROT	O19247 F44E7.2 PROTEIN.;
2912	15078	28327	2.01	0.0E+00	AF152338.1	NT	ZINC FINGER PROTEIN 132
2926	15094	28339	1.92	0.0E+00	AB033083.1	NT	Homo sapiens probocadherin gamma C4 (PCDH-gamma-C4) mRNA, complete cds
2928	15094	28340	1.92	0.0E+00	AB033083.1	NT	Homo sapiens mRNA for KIAA1287 protein, partial cds
2929	15095	28341	4.56	0.0E+00	AB040941.1	NT	Homo sapiens mRNA for KIAA1287 protein, partial cds
2929	15095	28342	4.56	0.0E+00	AB040941.1	NT	Homo sapiens mRNA for KIAA1508 protein, partial cds
2932	15098	28345	3.58	0.0E+00	7861903	NT	Homo sapiens KIAA0100 gene product (KIAA0100), mRNA
2932	15098	28346	3.58	0.0E+00	7861903	NT	Homo sapiens KIAA0100 gene product (KIAA0100), mRNA
2933	15099	28347	3.21	0.0E+00	5174574	NT	Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (trithorax (Drosophila) homolog); translocated to, 4 (MLLT4) mRNA
2933	15099	28348	3.21	0.0E+00	5174574	NT	Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (trithorax (Drosophila) homolog); translocated to, 4 (MLLT4) mRNA
2938	15703	28352	1.16	0.0E+00	BF110702.1	EST_HUMAN	7n40d03.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3567028 3' similar to TR:Q9VLN1
2938	15703	28353	1.16	0.0E+00	BF110702.1	EST_HUMAN	Q9VLN1 CG17283 PROTEIN.;
2946	15712	28364	2.15	0.0E+00	4505084	NT	7n40d03.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3567028 3' similar to TR:Q9VLN1
2946	15712	28365	2.15	0.0E+00	4505084	NT	Q9VLN1 CG17283 PROTEIN.;
2953	15719	28370	1.69	0.0E+00	4758827	NT	Homo sapiens melanoma antigen, family B, 4 (MAGEB4), mRNA
2954	15720		0.96	0.0E+00	X98494.1	NT	Homo sapiens melanoma antigen, family B, 4 (MAGEB4), mRNA
2957	15723	28373	2.98	0.0E+00	AB033034.1	NT	Homo sapiens neuron III (NRXN3) mRNA
2958	15724	28374	5.56	0.0E+00	X15309.1	NT	H sapiens mRNA for M phase phosphoprotein 10
2958	15724	28375	5.56	0.0E+00	X15309.1	NT	Homo sapiens mRNA for KIAA1208 protein, partial cds
2959	15725	28376	7.64	0.0E+00	AF108275.1	NT	H sapiens NF-H gene, exon 4
2973	15739		1.13	0.0E+00	AI149890.1	EST_HUMAN	H sapiens NF-H gene, exon 4
2980	15746	28394	1.12	0.0E+00	4506118	NT	H sapiens NF-H gene, exon 4
2981	15747	28395	2.85	0.0E+00	AB004884.1	NT	Homo sapiens immunoglobulin-like transcript 1c variant 4 (ILT1c) gene, exon 6
2981	15757	28404	1.52	0.0E+00	7682273	NT	qf43f09.x1 Soares testis NHT Homo sapiens cDNA clone IMAGE:1752809 3'
2983	15789	28406	3.75	0.0E+00	5729755	NT	Homo sapiens prospero-related homeobox 1 (PROX1) mRNA
2993	15759	28407	3.75	0.0E+00	5729755	NT	Homo sapiens KIAA0737 gene product (KIAA0737), mRNA
2997	15763	28412	1.1	0.0E+00	AB037852.1	NT	Homo sapiens calcium channel, voltage-dependent, gamma subunit 3 (CACNG3), mRNA
3025	15791	28439	1.17	0.0E+00	M74099.1	NT	Homo sapiens calcium channel, voltage-dependent, gamma subunit 3 (CACNG3), mRNA
							Homo sapiens mRNA for KIAA1431 protein, partial cds
							Human displacement protein (CCAA1) mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3033	15788	28445	0.71	0.0E+00	4508882	NT	Homo sapiens semenogelin I (SEMG1) mRNA
3039	15805		4.62	0.0E+00	AF195653.1	NT	Homo sapiens membrane-bound aminopeptidase P (XNPEP2) gene, complete cds
3042	15806	28454	3.74	0.0E+00	5579499	NT	Homo sapiens heat shock 70kD protein 1 (HSPA1A), mRNA
3042	15808	28455	3.74	0.0E+00	5579499	NT	Homo sapiens heat shock 70kD protein 1 (HSPA1A), mRNA
3044	15810		6.88	0.0E+00	AL359403.1	NT	Isform 2 of a novel human mRNA from chromosome 22
3049	15815	28460	1.8	0.0E+00	AF017433.1	NT	Homo sapiens putative transcription factor CRE3 (CR63) mRNA, partial cds
							Homo sapiens transcription factor G3HM enhancer 3, JM11 protein, JM4 protein, JM5 protein, T54 protein, JM10 protein, A4 differentiation-dependent protein, triple LIM domain protein 6, and synaptophysin genes, complete cds; and L-type calcium channel $\alpha$
3052	15818		1.98	0.0E+00	AF198779.1	NT	Homo sapiens chloride channel CLC4 (CLC4) mRNA, complete cds
3086	15832	28475	1.19	0.0E+00	AF170492.1	NT	Human germline gene 19.1 for Ig lambda L-chain C region (Ig-LC18.1)
3074	15840	28483	2.8	0.0E+00	X03528.1	NT	Homo sapiens F-box protein FBL5 (FBL5) mRNA, complete cds
3080	15845		1.64	0.0E+00	AF198355.1	NT	Homo sapiens melanoma-associated antigen (MAGE-C1) gene, complete cds
3084	15849	28490	1.72	0.0E+00	AF094589.1	NT	Homo sapiens SWI-SNF complex protein p270 mRNA, partial cds
3104	15869	28509	3.2	0.0E+00	AF265208.1	NT	Homo sapiens NOD1 protein (NOD1) gene, exons 1, 2, and 3
3105	15870	28510	7.83	0.0E+00	AF148773.1	NT	Homo sapiens NOD1 protein (NOD1) gene, exons 1, 2, and 3
3110	15875	28514	3.42	0.0E+00	7682139	NT	Homo sapiens KIAA0409 gene product (KIAA0409), mRNA
3111	15876	28515	1.21	0.0E+00	AF042075.1	NT	Homo sapiens olfactory receptor-like protein (OLFR 42B) gene, OLFR 42B-Q110 allele, partial cds
							Homo sapiens potassium voltage-gated channel, Shab-related subfamily, member 1 (KCNCB1) mRNA
3138	15902	28547	3.74	0.0E+00	4826783	NT	Human ferritin heavy chain mRNA, complete cds
3148	15911	28558	26.91	0.0E+00	L20841.1	NT	Homo sapiens mRNA for KIAA0549 protein, partial cds
3151	15914	28559	1.32	0.0E+00	AB011121.1	NT	Homo sapiens mRNA for KIAA0549 protein, partial cds
3151	15914	28560	1.32	0.0E+00	AB011121.1	NT	ye3203 s1 Stragene lung (R837210) Homo sapiens cDNA clone IMAGE:119463 3' similar to SP-S28639
3158	15921	28567	8.83	0.0E+00	T94870.1	EST_HUMAN	S29539 BASIC PROTEIN, 23K -
3172	15935	28584	0.98	0.0E+00	BF243336.1	EST_HUMAN	601878507F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:4107433 5'
3178	15941	28591	4.39	0.0E+00	X98922.1	NT	H. sapiens mRNA for gamma-glutamyltransferase
3178	15941	28592	4.39	0.0E+00	X98922.1	NT	H. sapiens mRNA for gamma-glutamyltransferase
3187	15950	28601	1.31	0.0E+00	4758627	NT	Homo sapiens neuritin III (NRXN3) mRNA
3187	15950	28602	1.31	0.0E+00	4758627	NT	Homo sapiens neuritin III (NRXN3) mRNA
3195	15958	28610	8.46	0.0E+00	4504658	NT	Homo sapiens interleukin 1 receptor, type I (IL1R1) mRNA
3211	15974	28628	3.25	0.0E+00	M28698.1	NT	Homo sapiens nucleolar phosphoprotein B23 (NPM1) mRNA, complete cds
							Homo sapiens solute carrier family 25 (mitochondrial carrier, adenine nucleotide translocator), member 5 (SLC25A5), nuclear gene encoding mitochondrial protein, mRNA
3214	15977	28628	1.96	0.0E+00	4502098	NT	Homo sapiens CREB binding protein (Rubinstein-Taybi syndrome) (CREBBP) mRNA
3220	15983	28636	0.85	0.0E+00	4758055	NT	Homo sapiens CREB binding protein (Rubinstein-Taybi syndrome) (CREBBP) mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3220	15983	28637	0.85	0.0E+00	4758055	NT	Homo sapiens CREB binding protein (Rubinstein-Taybi syndrome) (CREBBP) mRNA
3222	15985	28638	3.07	0.0E+00	AA774783.1	EST_HUMAN	ae87b11.a1 Strategene schizo brain S11 Homo sapiens cDNA clone IMAGE:971133 3'
3230	15993	28646	5.43	0.0E+00	AF286598.1	NT	Homo sapiens angiotensin binding protein 1 mRNA, complete cds
3230	15993	28647	5.43	0.0E+00	AF286598.1	NT	Homo sapiens angiotensin binding protein 1 mRNA, complete cds
3242	16004	28653	1.36	0.0E+00	4557590	NT	Homo sapiens fibrillin 1 (Marfan syndrome) (FBN1) mRNA
3248	16010	28661	1	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
3255	16017		5.8	0.0E+00	M65189.1	NT	Human connadin 43 processed pseudogene
3256	16018	28668	1.28	0.0E+00	AF019413.1	NT	Homo sapiens HLA class III region containing tenascin X (tenascin-X) gene, partial cds; cytochrome P450 21-hydroxylase (CYP21B), complement component C4 (C4B) G11, helicase (SKI2W), RD, complement factor B (Bf), and complement component C2 (C2) genes, >
3258	16020	28670	3.06	0.0E+00	AF056084.1	NT	Homo sapiens very large G-protein coupled receptor-1 (VLGR1) mRNA, complete cds
3261	16023	28672	1.11	0.0E+00	7682125	NT	Homo sapiens KIAA0440 protein (KIAA0440), mRNA
3261	16023	28673	1.11	0.0E+00	7682125	NT	Homo sapiens KIAA0440 protein (KIAA0440), mRNA
3269	17875	28680	2.09	0.0E+00	4502014	NT	Homo sapiens A kinase (PRKA) anchor protein 1 (AKAP1), mRNA
3269	17875	28681	2.09	0.0E+00	4502014	NT	Homo sapiens A kinase (PRKA) anchor protein 1 (AKAP1), mRNA
3285	16046	28685	2.25	0.0E+00	AF286208.1	NT	Homo sapiens A kinase (PRKA) anchor protein 1 (AKAP1), partial cds
3286	16047	28696	1.17	0.0E+00	8922624	NT	Homo sapiens SWI-SNF complex protein FLJ20695 (FLJ20695), mRNA
3287	16058	28708	1.22	0.0E+00	7657038	NT	Homo sapiens hypothetical protein FLJ20695 (FLJ20695), mRNA
3300	16082	28710	1.09	0.0E+00	AA994842.1	EST_HUMAN	Homo sapiens death receptor 6 (DR6), mRNA
3309	16089	28718	1.18	0.0E+00	4885312	NT	cu59e08.s1 NCL CGAP_Br2 Homo sapiens cDNA clone IMAGE:1632038 3'
3318	16078	28728	1.99	0.0E+00	AI589294.1	EST_HUMAN	Homo sapiens G protein-coupled receptor 24 (GPR24), mRNA
3326	16086	28736	2.33	0.0E+00	AF128983.1	NT	Homo sapiens 60S RIBOSOMAL PROTEIN L11, contains AU repetitive element;
3326	16086	28737	2.33	0.0E+00	AF128983.1	NT	P25121 60S RIBOSOMAL PROTEIN L11, contains AU repetitive element;
3327	16087	28738	1.22	0.0E+00	7667213	NT	Homo sapiens telomerase reverse transcriptase (TERT) gene, exons 1-6
3327	16087	28739	1.22	0.0E+00	7667213	NT	Homo sapiens telomerase reverse transcriptase (TERT) gene, exons 1-6
3329	16089	28741	1.27	0.0E+00	4502582	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
3329	16089	28742	1.27	0.0E+00	4502582	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
3333	16093	28745	9.77	0.0E+00	AF111163.1	NT	Homo sapiens caspase 8, apoptosis-related cysteine protease (CASP8) mRNA
3335	16095	28747	1.28	0.0E+00	AB040940.1	NT	Homo sapiens caspase 8, apoptosis-related cysteine protease (CASP8) mRNA
3342	16101	28753	0.94	0.0E+00	BE779039.1	EST_HUMAN	Homo sapiens caspase 8, apoptosis-related cysteine protease (CASP8) mRNA
3352	16112	28787	0.72	0.0E+00	AI632659.1	EST_HUMAN	Homo sapiens pyrin (MEFY) gene, complete cds
3361	16150	28804	4.44	0.0E+00	AU123664.1	EST_HUMAN	Homo sapiens mRNA for KIAA1507 protein, partial cds
							Homo sapiens mRNA for KIAA1507 protein, partial cds
							601494985F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3868248 5'
							wb10704.x1 NCL CGAP_G08 Homo sapiens cDNA clone IMAGE:2305278 3' similar to TR:Q91928 Q91929
							ZINC FINGER PROTEIN, ;
							AU123664 NT2RM2 Homo sapiens cDNA clone NT2RM2000735 5'

Table 4  
Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3398	16156	28807	0.95	0.0E+00	7383438	NT	Homo sapiens olfactory receptor, family 10, subfamily C, member 1 (OR10C1), mRNA
3398	16156	28808	0.95	0.0E+00	7383438	NT	Homo sapiens olfactory receptor, family 10, subfamily C, member 1 (OR10C1), mRNA
3401	16159	28810	1.36	0.0E+00	7706239	NT	Homo sapiens neuroblastoma-enriched protein (LOC51504), mRNA
3402	16160	28811	1.42	0.0E+00	AF211188.1	NT	Homo sapiens T-type calcium channel alpha1 subunit Alpha1-a isoform (CACNA1I) mRNA, complete cds
3408	16164		0.99	0.0E+00	AW887015.1	EST_HUMAN	MR1-SN0033-100400-001-c08 SN0033 Homo sapiens cDNA
3418	16175	28824	1.66	0.0E+00	7662401	NT	Homo sapiens KIAA0952 protein (KIAA0952), mRNA
3418	16175	28825	1.66	0.0E+00	7662401	NT	Homo sapiens KIAA0952 protein (KIAA0952), mRNA
3419	16178	28828	1.34	0.0E+00	4602398	NT	Homo sapiens beaded filament structural protein 1, filensin (BFSP1) mRNA
3421	16178	28827	5.37	0.0E+00	5803067	NT	Homo sapiens leukocyte immunoglobulin-like receptor, subfamily A (with TM domain), member 2 (LILRA2), mRNA
3430	15441	28179	1.75	0.0E+00	AF110763.1	NT	Homo sapiens skeletal muscle LIM-protein 1 (FHL1) gene, complete cds
3435	16191	28840	2.4	0.0E+00	7857038	NT	Homo sapiens death receptor 6 (DR6), mRNA
3438	16194	28844	5.47	0.0E+00	K02380.1	NT	Bacteriophage P1 replication region including repA, perA, and parB genes and IncA, IncB, and IncC
3440	16196	28846	1.5	0.0E+00	7427522	NT	Incompatibility determinants
3448	16204	28853	3.54	0.0E+00	A1935159.1	EST_HUMAN	Homo sapiens protein tyrosine phosphatase, receptor type, T (PTPR7), mRNA
3448	16204	28854	3.54	0.0E+00	A1935159.1	EST_HUMAN	wp14d10.x1 NCL CGAP_Lu19 Homo sapiens cDNA clone IMAGE:2484819 3' similar to TR:073634 073634
3452	16208	28859	2.48	0.0E+00	AJ278120.1	NT	NEURAL CELL ADHESION MOLECULE.
3459	16216	28868	1.82	0.0E+00	6552332	NT	NEURAL CELL ADHESION MOLECULE.
3459	16215	28869	1.82	0.0E+00	6552332	NT	Homo sapiens mRNA for putative arylsulfatase containing protein (ORF1)
3464	16220	28874	1.31	0.0E+00	M14123.1	NT	Homo sapiens v-fos FBJ murine osteosarcoma viral oncogene homolog (FOS), mRNA
3470	16226	28880	5.4	0.0E+00	U43283.1	NT	Homo sapiens v-fos FBJ murine osteosarcoma viral oncogene homolog (FOS), mRNA
3476	16231	28884	1.18	0.0E+00	9568718	NT	Human endogenous retrovirus HERV-K10
3476	16231	28885	1.18	0.0E+00	9568718	NT	Human MDS1A (AML1/MDS1 fusion) mRNA, partial cds
3479	16235	28890	1.84	0.0E+00	AF045452.1	NT	Homo sapiens hypothetical protein (AF038169), mRNA
3479	16235	28891	1.84	0.0E+00	AF045452.1	NT	Homo sapiens cell-line KG1 transcriptional regulatory protein p54 mRNA, complete cds
3484	16241	28898	1.12	0.0E+00	AF231922.1	NT	Homo sapiens cell-line KG1 transcriptional regulatory protein p54 mRNA, complete cds
3496	16252	28905	2.21	0.0E+00	BE304791.1	EST_HUMAN	Homo sapiens chromosome 21 unknown mRNA
3496	16252	28906	2.21	0.0E+00	BE304791.1	EST_HUMAN	601143853F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:3051373 5'
3499	16255	28909	0.92	0.0E+00	4826795	NT	601143853F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:3051373 5'
							Homo sapiens potassium voltage-gated channel, Isk-related family, member 2 (KCNE2) mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3504	16260	28914	0.89	0.0E+00	A1884007.1	EST_HUMAN	1635g12.x1 Soares_NHIMPu_S1 Homo sapiens cDNA clone IMAGE:2088742 3' similar to TR:000468
3507	16263	28917	1.11	0.0E+00	M10976.1	NT	000468 MYASTHENIA GRAVIS AUTOANTIGEN GRAVIN;
3529	16285	28940	1.29	0.0E+00	AV701898.1	EST_HUMAN	Human endogenous retroviral DNA (4-1), complete retroviral segment
3530	16286	28941	0.85	0.0E+00	4506884	NT	AV701899 ADB Homo sapiens cDNA clone ADBDAH08 5'
3531	16287		1.74	0.0E+00	AF078868.1	NT	Homo sapiens semogelin II (SEM32) mRNA
3539	16295	28945	1.49	0.0E+00	AL133204.1	NT	Homo sapiens homologous yeast-44.2 protein mRNA, complete cds
3542	16297	28948	1.21	0.0E+00	AB040909.1	NT	Novel human gene mapping to chromosome X
3561	16316	28963	1.37	0.0E+00	6907248	NT	Homo sapiens mRNA for KIAA1476 protein, partial cds
3561	16316	28964	1.37	0.0E+00	6907248	NT	Homo sapiens ssi (Drosophila)-like 1 (SALL1), mRNA
3582	16317		0.89	0.0E+00	A1081907.1	EST_HUMAN	Homo sapiens ssi (Drosophila)-like 1 (SALL1), mRNA
3584	16319	28967	1.04	0.0E+00	6326463	NT	α77c11.x1 Soares_NHIMPu_S1 Homo sapiens cDNA clone IMAGE:1662356 5' similar to WP:118B4.4
3589	16324		4.17	0.0E+00	AW852217.1	EST_HUMAN	CE13742;
3576	16331		0.78	0.0E+00	AF118946.1	NT	Homo sapiens butyrophilin, subfamily 3, member A3 (BTN3A3), mRNA
3577	16332	28976	6.46	0.0E+00	BF676393.1	EST_HUMAN	QV0-GT0225-230300-188-e01 CT0225 Homo sapiens cDNA
3589	16343	28988	0.9	0.0E+00	AW937977.1	EST_HUMAN	Homo sapiens gamma-glutamylcysteine synthetase (GLC1G) gene, partial cds
3603	16356	28996	0.74	0.0E+00	BF672054.1	EST_HUMAN	Homo sapiens gamma-glutamylcysteine synthetase (GLC1G) gene, partial cds
3603	16356	28997	0.74	0.0E+00	BF672054.1	EST_HUMAN	602084583F1 NIH_MGC 83 Homo sapiens cDNA clone IMAGE:4248598 5'
3604	16357		0.95	0.0E+00	4828987	NT	QV0-DT0047-170200-123-g01 DT0047 Homo sapiens cDNA
3606	16359	28998	1.08	0.0E+00	AW664693.1	EST_HUMAN	QV0-DT0047-170200-123-g01 DT0047 Homo sapiens cDNA
3606	16359	29000	1.08	0.0E+00	AW664693.1	EST_HUMAN	602152496F1 NIH_MGC 81 Homo sapiens cDNA clone IMAGE:4293645 5'
3609	16362	29004	1.42	0.0E+00	4828783	NT	602152496F1 NIH_MGC 81 Homo sapiens cDNA clone IMAGE:4293645 5'
3611	16364	29007	0.93	0.0E+00	7062319	NT	Homo sapiens retinoblastoma-binding protein 2 (RBBP2) mRNA
3621	16374	29015	0.82	0.0E+00	4567752	NT	hi84g01.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2978024 3'
3621	16374	29016	0.82	0.0E+00	4567752	NT	hi84g01.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2978024 3'
3638	16391	29030	2.67	0.0E+00	D8737.1	NT	Homo sapiens heparan sulfate (glucosaminide) 3-O-sulfotransferase 1 (HS3ST1) mRNA
3642	16395		33.2	0.0E+00	7069491	NT	Homo sapiens KIAA0806 gene product (KIAA0806), mRNA
3668	16411	29049	2.6	0.0E+00	AB026642.1	NT	Homo sapiens midline 1 (Optiz/BBB syndrome) (MID1) mRNA
3668	16413	29051	3.38	0.0E+00	AF124250.1	NT	Homo sapiens midline 1 (Optiz/BBB syndrome) (MID1) mRNA
3668	16413	29052	3.38	0.0E+00	AF124250.1	NT	Homo sapiens midline 1 (Optiz/BBB syndrome) (MID1) mRNA
3668	16421	29061	1.85	0.0E+00	AL163204.2	NT	Homo sapiens mRNA for G protein-coupled inward rectifier potassium channel, complete cds
3668	16421	29062	1.85	0.0E+00	AL163204.2	NT	Homo sapiens glyceraldehyde-3-phosphate dehydrogenase (GAPD), mRNA
3671	16424	29065	1.62	0.0E+00	AW851714.1	EST_HUMAN	Homo sapiens WAVE2 mRNA for WASP-family protein, complete cds
							Homo sapiens WAVE2 mRNA for WASP-family protein, complete cds
							Homo sapiens SH2-containing protein Nsp2 mRNA, complete cds
							Homo sapiens SH2-containing protein Nsp2 mRNA, complete cds
							Homo sapiens chromosome 21 segment HS21C004
							Homo sapiens chromosome 21 segment HS21C004
							MR2-CT0222-281089-005-e05 CT0222 Homo sapiens cDNA

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3673	16426	29067	1.53	0.0E+00	5729028	NT	Homo sapiens matrix metalloproteinase 24 (membrane-inserted) (MMP24), mRNA
3675	16428	29068	1.81	0.0E+00	AB018339.1	NT	Homo sapiens mRNA for KIAA0796 protein, partial cds
3677	16430	29071	1.1	0.0E+00	AB020717.1	NT	Homo sapiens mRNA for KIAA0810 protein, partial cds
3677	16430	29072	1.1	0.0E+00	AB020717.1	NT	Homo sapiens mRNA for KIAA0810 protein, partial cds
3679	16432	29074	22.21	0.0E+00	7682237	NT	Homo sapiens KIAA0670 protein/actin (KIAA0670), mRNA
3679	16432	29075	22.21	0.0E+00	7682237	NT	Homo sapiens KIAA0670 protein/actin (KIAA0670), mRNA
3692	16445	29084	4.35	0.0E+00	AW298134.1	EST_HUMAN	U1H-BW0-eps-12-Q-U1.s1 NCI_CGAP_Sub6 Homo sapiens cDNA clone IMAGE:2733022 3'
3692	16445	29085	4.35	0.0E+00	AW298134.1	EST_HUMAN	U1H-BW0-eps-12-Q-U1.s1 NCI_CGAP_Sub6 Homo sapiens cDNA clone IMAGE:2733022 3'
3714	16467	29105	1.08	0.0E+00	AA463659.1	EST_HUMAN	ss06g01.1 Soares_NHIMPu_S1 Homo sapiens cDNA clone IMAGE:812496 5' similar to SW:KRB4_SHEEP P02445 KERATIN, HIGH-SULFUR MATRIX PROTEIN, IIB4, [1];
3718	16471	29109	1.14	0.0E+00	AB020710.1	NT	Homo sapiens mRNA for KIAA0903 protein, partial cds
3721	16474	29111	3.31	0.0E+00	7657468	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
3730	16482	29120	0.82	0.0E+00	AB037835.1	NT	Homo sapiens mRNA for KIAA1414 protein, partial cds
3742	16495	29130	4.9	0.0E+00	7662183	NT	Homo sapiens KIAA0569 gene product (KIAA0569), mRNA
3745	16498	29133	4.29	0.0E+00	4509718	NT	Homo sapiens ribosomal protein S2 (RPS2) mRNA
3751	16503	29138	1.08	0.0E+00	7657065	NT	Homo sapiens v-ets avian erythroblast virus E26 oncogene related (ERG), mRNA
3751	16503	29139	1.08	0.0E+00	7657065	NT	Homo sapiens v-ets avian erythroblast virus E26 oncogene related (ERG), mRNA
3800	16552		0.71	0.0E+00	AF195658.1	NT	Homo sapiens DNA mismatch repair protein (MLH3) gene, complete cds
3802	16554	29185	2.88	0.0E+00	AF179733.1	NT	Pan troglodytes olfactory receptor (PTR208) gene, partial cds
3804	16556	29187	2.3	0.0E+00	7657468	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
3804	16556	29188	2.3	0.0E+00	7657468	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
3808	16560	29183	1.24	0.0E+00	4759011	NT	Homo sapiens RAB9, member RAS oncogene family (RAB9) mRNA
3808	16561	29184	1.01	0.0E+00	10181139	NT	Mus musculus Junctophilin 1 (Jp1-pending), mRNA
3812	16584	29197	1.01	0.0E+00	A1377689.1	EST_HUMAN	te62f10.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2091307 3'
3813	16585		1.97	0.0E+00	AF152496.1	NT	Homo sapiens protocadherin beta 3 (PCDH-beta3) mRNA, complete cds
3814	16586	29198	1.14	0.0E+00	4768199	NT	Homo sapiens desmoplakin (DPI, DPLI) (DSP) mRNA
3818	16570	29202	10.39	0.0E+00	S76885.1	NT	Homo sapiens ATP-sensitive inwardly rectifying K-channel subunit (KCNJ8/BIR1) gene, complete cds
3819	16571	29203	2.22	0.0E+00	7710148	NT	Homo sapiens methyl CpG binding protein 2 (MECP2), mRNA
3820	16572	29204	6.03	0.0E+00	7662183	NT	Homo sapiens KIAA0569 gene product (KIAA0569), mRNA
3824	16576	29207	1.23	0.0E+00	AF098601.2	NT	Homo sapiens myosin light chain kinase isoform 2 (MLCK) mRNA, complete cds
3824	16576	29208	1.23	0.0E+00	AF098601.2	NT	Homo sapiens myosin light chain kinase isoform 2 (MLCK) mRNA, complete cds
3829	16580	29213	0.97	0.0E+00	AB001523.1	NT	Homo sapiens gene for TMEM1 and PWP2, complete and partial cds
3829	16580	29214	0.97	0.0E+00	AB001523.1	NT	Homo sapiens gene for TMEM1 and PWP2, complete and partial cds



Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3831	16582	28216	1.12	0.0E+00	6812735	NT	Homo sapiens transient receptor potential channel 5 (TRPC5), mRNA
3835	16586	28222	6.16	0.0E+00	4503178	NT	Homo sapiens chromosome X open reading frame 5 (CXORF5) mRNA
3835	16586	28223	6.16	0.0E+00	4503178	NT	Homo sapiens chromosome X open reading frame 5 (CXORF5) mRNA
3837	16588	28226	4.04	0.0E+00	U09412.1	NT	Human zinc finger protein ZNF134 mRNA, complete cds
3838	16589	28227	0.89	0.0E+00	AF114488.1	NT	Homo sapiens Intersectin short isoform (ITSN) mRNA, complete cds
3841	16592	28229	2.96	0.0E+00	4826783	NT	Homo sapiens potassium voltage-gated channel, Shab-related subfamily, member 1 (KCNB1) mRNA
3844	16595	28232	1.05	0.0E+00	AF012015.1	NT	Homo sapiens familial mental retardation protein 2 (FMR2) gene, exon 11
3845	16596	28233	1.43	0.0E+00	4759171	NT	Homo sapiens SC35-interacting protein 1 (SRRP129), mRNA
3847	16598	28235	0.74	0.0E+00	AF099117.1	NT	Homo sapiens amphiphysin gene, partial cds
3856	16606	28244	2.16	0.0E+00	AI864727.1	EST_HUMAN	wk0101.x1 NCI_CGAP_Lym12 Homo sapiens cDNA clone IMAGE:2411065 3' similar to TR:043340
3859	16609	28248	4.24	0.0E+00	4506742	NT	O43340 R28830_2, contains element PTR7 repetitive element;
3862	16612	28251	1.35	0.0E+00	AL040338.1	EST_HUMAN	Homo sapiens ribosomal protein S8 (RPS8), mRNA
3867	16617	28256	1.28	0.0E+00	6005887	NT	DKFZp434N0413.1 434 (synonym: hta3) Homo sapiens cDNA clone DKFZp434N0413 5'
3867	16617	28257	1.28	0.0E+00	6005887	NT	Homo sapiens AP1 gamma subunit binding protein 1 (AP1GBP1), mRNA
3869	16619	28259	3.22	0.0E+00	4504138	NT	Homo sapiens AP1 gamma subunit binding protein 1 (AP1GBP1), mRNA
3871	16621	28261	1.82	0.0E+00	4505078	NT	Homo sapiens glutamate receptor, metabotropic 3 (GRM3) mRNA
3875	16625	28263	1.18	0.0E+00	AF149412.1	NT	Homo sapiens melanoma antigen, family B, 1 (MAGEB1) mRNA
3884	16634	28273	1.2	0.0E+00	4506758	NT	Homo sapiens HBP17 heparin-binding and FGF-binding protein gene, complete cds
3888	16638	28277	1.47	0.0E+00	4685842	NT	Homo sapiens dynactin receptor 3 (RYR3) mRNA
3896	16646	28286	1.18	0.0E+00	BF355295.1	EST_HUMAN	Homo sapiens zinc finger protein (KIAA0412) mRNA
3898	16648	28288	1.06	0.0E+00	AW888221.1	EST_HUMAN	RC3-HT0880-170800-011-412 HT0880 Homo sapiens cDNA
3898	16648	28288	1.06	0.0E+00	AW888221.1	EST_HUMAN	MXRA5 Human matrix tissue expression library Homo sapiens cDNA clone Incyte 1986726 similar to MXRA5
3898	16648	28288	1.06	0.0E+00	AW888221.1	EST_HUMAN	Matrix remodelling associated gene 5
3904	16654	28286	1.82	0.0E+00	AF129633.1	NT	MXRA5 Human matrix tissue expression library Homo sapiens cDNA clone Incyte 1986728 similar to MXRA5
3907	16657	28288	1	0.0E+00	AW451306.1	EST_HUMAN	Matrix remodelling associated gene 5
3912	16662	28303	2.81	0.0E+00	BE376802.1	EST_HUMAN	Homo sapiens F-box protein Fbx3b (FBL3B) mRNA, partial cds
3920	16670	28311	0.92	0.0E+00	AW580740.1	EST_HUMAN	UI-H-B18-ali-g-07-Q.U.1.1 NCI CGAP Sub55 Homo sapiens cDNA clone IMAGE:2736949 3'
3922	16672	28312	2.49	0.0E+00	5360215	NT	601236068F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3608800 5'
3923	16673	28313	0.98	0.0E+00	BE284998.1	EST_HUMAN	PM3-LT0031-100100-003-109 LT0031 Homo sapiens cDNA
3923	16673	28314	0.98	0.0E+00	BE284998.1	EST_HUMAN	Homo sapiens Idunella 2-sulfatase (Hunter syndrome) (IDS), transcript variant 1, mRNA
3952	16702	28339	1.42	0.0E+00	U106901.1	NT	601193827F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3537774 5'
							601193827F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3537774 5'
							Human G2 protein mRNA, partial cds

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## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3952	16702	28340	1.42	0.0E+00	U10991.1	NT	Human G2 protein mRNA, partial cds
3952	16702	28341	1.42	0.0E+00	U10991.1	NT	Human G2 protein mRNA, partial cds
3957	16706	28344	4.69	0.0E+00	AF116185.1	NT	Homo sapiens cancer-testis antigen CT10 (CT10) gene, complete cds
3957	16706	28345	4.69	0.0E+00	AF116185.1	NT	Homo sapiens cancer-testis antigen CT10 (CT10) gene, complete cds
3968	16715		4.39	0.0E+00	M23910.1	NT	Human MHC class II lymphocyte antigen DPw4-beta-2 pseudogene, exon 2
3968	16717		5.74	0.0E+00	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
3975	16724	28359	1.35	0.0E+00	AL118494.1	NT	Novel human gene mapping to chromosome 20
3978	16727	28361	3.22	0.0E+00	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
3987	16735	28369	1.71	0.0E+00	AL163288.2	NT	Homo sapiens chromosome 21 segment HS21C089
3989	16747		27.98	0.0E+00	4503470	NT	Homo sapiens eukaryotic translation elongation factor 1 alpha 1 (EEF1A1) mRNA
4003	16760		1.15	0.0E+00	AL657076.1	EST_HUMAN	t55508.x1 NC1 CGAP_G08 Homo sapiens cDNA clone IMAGE:2244734 3' similar to TR:060309 060309 KIAA0563 PROTEIN ;
4005	16761	28382	2.97	0.0E+00	7682183	NT	Homo sapiens KIAA0569 gene product (KIAA0569), mRNA
4006	16762	28383	2.65	0.0E+00	U09366.1	NT	Human zinc finger protein ZNF133
4013	16769	28387	0.95	0.0E+00	AW339490.1	EST_HUMAN	xx21e10.x1 NC1 CGAP_Lu24 Homo sapiens cDNA clone IMAGE:2871594 3'
4024	16769	28401	6.33	0.0E+00	AB015610.1	NT	Chlorocibus aethiops mRNA for ribosomal protein S4, complete cds
4033	16778		3.72	0.0E+00	AJ238817.1	NT	Homo sapiens mRNA for UGA suppressor tRNA-associated antigenic protein (RNA48 gene)
4045	16790	28418	1.82	0.0E+00	AB002314.2	NT	Homo sapiens mRNA for KIAA0316 protein, partial cds
4046	16791	28419	1.04	0.0E+00	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
4047	16792	28420	1.18	0.0E+00	AF086943.1	NT	Homo sapiens myelin transcription factor 1-like (MTF1-L) mRNA, complete cds
4048	16793	28421	2.65	0.0E+00	AJ277276.1	NT	Homo sapiens mRNA for rape-2 (rape gene)
4048	16793	28422	2.65	0.0E+00	AJ277276.1	NT	Homo sapiens mRNA for rape-2 (rape gene)
4054	16799	28429	6.29	0.0E+00	5032026	NT	Homo sapiens retinoblastoma-binding protein 4 (RBBP4) mRNA
4054	16799	28430	6.29	0.0E+00	5032026	NT	Homo sapiens retinoblastoma-binding protein 4 (RBBP4) mRNA
4060	16813	28442	4.7	0.0E+00	4885306	NT	Homo sapiens G protein-coupled receptor 21 (GPR21), mRNA
4070	16814	28443	5.98	0.0E+00	AB006626.1	NT	Homo sapiens res GTPase activating protein-like (NGAP) mRNA
4073	16817	28444	1.11	0.0E+00	4758807	NT	Homo sapiens mRNA for KIAA0287 gene, partial cds
4074	16818	28445	5.87	0.0E+00	11419287	NT	Homo sapiens res GTPase activating protein-like (NGAP) mRNA
4075	16819	28446	1.94	0.0E+00	AL068857.1	NT	Homo sapiens IMP (inosine monophosphate) dehydrogenase 1 (IMPDH1), mRNA
4082	16826	28453	2.71	0.0E+00	AF165527.1	NT	Novel human mRNA from chromosome 1, which has similarities to BAT2 genes
4091	13867	28525	0.82	0.0E+00	4829947	NT	Homo sapiens DGCR8 (DGCR8) mRNA, complete cds
4091	13867	28526	0.82	0.0E+00	4829947	NT	Homo sapiens protein kinase, X-linked (PRICK) mRNA
4097	16840	28486	1.09	0.0E+00	5901905	NT	Homo sapiens butyrophilin, subfamily 3, member A2 (BTN3A2), mRNA
4099	16842	28489	1.08	0.0E+00	4303854	NT	Homo sapiens GA-binding protein transcription factor, alpha subunit (60kD) (GABPA), mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4099	16842	29470	1.08	0.0E+00	4503854	NT	Homo sapiens GA-binding protein transcription factor, alpha subunit (GABPA), mRNA
4107	16850	29478	0.89	0.0E+00	AB020702.1	NT	Homo sapiens mRNA for KIAA0895 protein, partial cds
4112	16855	29482	4.93	0.0E+00	AI982597.1	EST_HUMAN	wu04d04.x1 NCJ_CGAP_G08 Homo sapiens cDNA clone IMAGE:2515975 3'
4112	16855	29483	4.93	0.0E+00	AI982597.1	EST_HUMAN	wu04d04.x1 NCJ_CGAP_G08 Homo sapiens cDNA clone IMAGE:2515975 3'
4115	16857	29485	0.82	0.0E+00	BE184858.1	EST_HUMAN	MR1-HT0707-100500-001-002 HT0707 Homo sapiens cDNA
4115	16857	29488	0.82	0.0E+00	BE184858.1	EST_HUMAN	MR1-HT0707-100500-001-002 HT0707 Homo sapiens cDNA
4120	16862	29495	2.34	0.0E+00	BE274217.1	EST_HUMAN	601120778F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:2867690 5'
4126	16868	29498	0.99	0.0E+00	AB032951.1	NT	Homo sapiens mRNA for KIAA1125 protein, partial cds
4126	16868	29498	0.99	0.0E+00	AB032951.1	NT	Homo sapiens nuclear receptor coactivator 3 (NCOA3), mRNA
4128	16870	29498	2.24	0.0E+00	5729725	NT	Homo sapiens mRNA for KIAA1125 protein, partial cds
4135	16877		5.52	0.0E+00	AW875599.1	EST_HUMAN	ba51f04.x1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2900095 3' similar to SW:TH12_BOVIN
4140	16882	29511	1.14	0.0E+00	AW408788.1	EST_HUMAN	Q85108 MITOCHONDRIAL THIOREDOXIN PRECURSOR ;
4142	16884	29514	1.28	0.0E+00	8922468	NT	UI-HF-BM0-adv-c-02-0-J1.1 NIH_MGC_38 Homo sapiens cDNA clone IMAGE:3083147 5'
4142	16884	29515	1.28	0.0E+00	8922468	NT	Homo sapiens hypothetical protein FLJ10498 (FLJ10498), mRNA
4151	16893		2.8	0.0E+00	5174832	NT	Homo sapiens polycystic kidney disease (polycystin) and REJ (sperm receptor for eggs jelly, see urchin homolog)-like (PKDREJ) mRNA
4189	16909	29537	8.97	0.0E+00	AA401438.1	EST_HUMAN	z06h07.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:743197 3' similar to contains Alu
4205	16946	29538	8.97	0.0E+00	AA401438.1	EST_HUMAN	repetitive element/contains element MER35 repetitive element ;
4240	16981	29606	1.01	0.0E+00	AL163303.2	NT	z06h07.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:743197 3' similar to contains Alu
4255	16998	29626	0.83	0.0E+00	AW936889.1	EST_HUMAN	repetitive element/contains element MER35 repetitive element ;
4261	17002	29633	0.74	0.0E+00	4828827	NT	Homo sapiens chromosome 21 segment HS21C103
4261	17002	29634	0.74	0.0E+00	4828827	NT	Homo sapiens apolipoprotein B-100 mRNA, complete cds
4263	17004	29636	4.7	0.0E+00	AF174590.1	EST_HUMAN	PM2-DT0023-080300-004-008 DT0023 Homo sapiens cDNA
4270	17010		2.52	0.0E+00	AI189844.1	EST_HUMAN	Homo sapiens myelodysplasia syndrome 1 (MDS1) mRNA
4273	17012		4.32	0.0E+00	U14520.1	NT	Homo sapiens myelodysplasia syndrome 1 (MDS1) mRNA
4285	17024	29650	1.35	0.0E+00	4503848	NT	Homo sapiens F-box protein Fbx4 (FBL4) mRNA, partial cds
4291	17030	29667	0.78	0.0E+00	6563384	NT	Homo sapiens placenta, 800weeks_2NbfHf80c9W Homo sapiens cDNA clone IMAGE:1724579 3'
4291	17030	29658	0.78	0.0E+00	6563384	NT	similar to contains MER20.b2 MER20 repetitive element ;
4297	17036	29684	1.58	0.0E+00	U10991.1	NT	Human C8FAS (CbfA2) gene, partial cds
							Human sapiens protein kinase C, nu (PRKCN), mRNA
							Human sapiens protein kinase C, nu (PRKCN), mRNA
							Human G2 protein mRNA, partial cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4297	17038	29865	1.58	0.0E+00	U10991.1	NT	Human G2 protein mRNA, partial cds
4307	17046	29871	8.31	0.0E+00	8912281	NT	Homo sapiens COMPLEMENT COMPONENT C1q RECEPTOR (C1QR), mRNA
4327	17066		1.16	0.0E+00	AF153047.2	NT	Homo sapiens gap junction protein connexin-38 (CX36) gene, complete cds
4337	17076	29704	4.17	0.0E+00	L14561.1	NT	Homo sapiens plasma membrane calcium ATPase isoform 1 (ATP2B1) gene, alternative splice products, partial cds
4341	17080	29709	2.88	0.0E+00	Z80780.1	NT	H. sapiens H2B/h gene
4341	17080	29710	2.88	0.0E+00	Z80780.1	NT	H. sapiens H2B/h gene
4342	17081	29711	0.94	0.0E+00	AW166833.1	EST_HUMAN	xc68e10.x1 NCL CGAP U14 Homo sapiens cDNA clone IMAGE:2633514 3' similar to TR:P97365 P97365
4348	17087	29717	1.42	0.0E+00	X60483.1	NT	ZINC FINGER PROTEIN 64;
4348	17087	29718	1.42	0.0E+00	X60483.1	NT	H. sapiens H4/d gene for H4 histone
4353	17091	29724	8.62	0.0E+00	7662091	NT	H. sapiens H4/d gene for H4 histone
4353	17091	29725	8.62	0.0E+00	7662091	NT	Homo sapiens KIAA0390 gene product (KIAA0390), mRNA
4366	17104	29740	12.59	0.0E+00	4985126	NT	Homo sapiens KIAA0390 gene product (KIAA0390), mRNA
4387	17105	29741	1.14	0.0E+00	AJ271738.1	NT	Homo sapiens caudal type homeo box transcription factor 4 (CDX4), mRNA
4400	17137	29796	0.98	0.0E+00	7018456	NT	Homo sapiens Xq pseudocentromeric region, segment 2/2
4408	17145		0.5	0.0E+00	AF195953.1	NT	Homo sapiens myosin regulatory light chain interacting protein (MLR), mRNA
4414	17151	29778	1.25	0.0E+00	AJ249765.1	NT	Homo sapiens membrane-bound aminopeptidase P (XNPEP2) gene, complete cds
4414	17151	29779	1.25	0.0E+00	AJ249765.1	NT	Homo sapiens ACTN2 gene for alpha-Actinin 2, exon 10
4436	17172		1.81	0.0E+00	AF200629.1	NT	Homo sapiens ACTN2 gene for alpha-Actinin 2, exon 10
4453	17189	29814	1.43	0.0E+00	T10233.1	EST_HUMAN	Homo sapiens HPST gene, intron 5
4453	17189	29815	1.43	0.0E+00	T10233.1	EST_HUMAN	seq1329 b4HB3MA Cc68-HAP-F1 Homo sapiens cDNA clone b4HB3MA-COT8-HAP-F1205 5'
4456	17192		0.73	0.0E+00	M14123.1	NT	seq1329 b4HB3MA Cc68-HAP-F1 Homo sapiens cDNA clone b4HB3MA-COT8-HAP-F1205 5'
4466						NT	Human endogenous retrovirus HERV-K10
4466	17202	29828	5.88	0.0E+00	AW084964.1	EST_HUMAN	xc68e10.x1 NCL CGAP_Es02 Homo sapiens cDNA clone IMAGE:2690448 3' similar to SW:AHNK_HUMAN
4468	17881		1.57	0.0E+00	8051619	NT	Q09666 NEUROBLAST DIFFERENTIATION ASSOCIATED PROTEIN AHNK ;
4470	17205	29831	0.93	0.0E+00	A1996998.1	EST_HUMAN	Homo sapiens LIM domain kinase 2 (LIMK2), transcript variant 2a, mRNA
4473	17208		8.82	0.0E+00	AL163207.2	NT	wc66602.x1 NCL CGAP_P28 Homo sapiens cDNA clone IMAGE:2322603 3' similar to contains MEER22.b2
4475	17210	29835	3.17	0.0E+00	AW381570.1	EST_HUMAN	PTR5 repetitive element;
4481	17216	29842	1.99	0.0E+00	AJ278120.1	NT	Homo sapiens chromosome 21 segment HS21C007
4481	17216	29843	1.99	0.0E+00	AJ278120.1	NT	PM1-HT0305-101189-002-03 HT0305 Homo sapiens cDNA
4483	17218	29845	1.29	0.0E+00	4759467	NT	Homo sapiens mRNA for putative ankryrin-repeat containing protein (ORF-1)
4484	17219	29846	2.88	0.0E+00	AF108830.1	NT	Homo sapiens mRNA for putative ankryrin-repeat containing protein (ORF-1)
						NT	Homo sapiens G protein-coupled receptor 50 (GPR50) mRNA
						NT	Homo sapiens serine-threonine protein kinase (MIBH) mRNA, complete cds

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4493	17229	29858	1.26	0.0E+00	S78884.1	NT	Homo sapiens ATP-sensitive inwardly rectifying K-channel subunit (KCNJ6/BIR1) gene, exon
4494	17230	29859	1.06	0.0E+00	AF111163.1	NT	Homo sapiens pyrin (MEFV) gene, complete cds
4494	17230	29860	1.06	0.0E+00	AF111163.1	NT	Homo sapiens pyrin (MEFV) gene, complete cds
4502	17882	29870	2.56	0.0E+00	6005973	NT	Homo sapiens zinc finger protein 195 (ZNF195), mRNA
4507	17242	29875	6.16	0.0E+00	AF208161.1	NT	Homo sapiens synovial precursor, mRNA, complete cds
4512	17247	29882	4.31	0.0E+00	AF152337.1	NT	Homo sapiens proto-oncogene gamma C3 (PCDH-gamma-C3) mRNA, complete cds
4515	17250	29886	1.32	0.0E+00	5484175	NT	Homo sapiens zinc finger protein 211 (ZNF211), mRNA
4526	17260	29894	15.47	0.0E+00	4503470	NT	Homo sapiens eukaryotic translation elongation factor 1 alpha 1 (EEF1A1) mRNA
4532	17267	29900	0.79	0.0E+00	4505016	NT	Homo sapiens low density lipoprotein receptor-related protein 6 (LRP6) mRNA, and translated products
4536	17271	29903	1.61	0.0E+00	4503098	NT	Homo sapiens chondroitin sulfate proteoglycan 4 (melanoma-associated) (CSPG4), mRNA
4540	17276	29908	2.03	0.0E+00	4502656	NT	Homo sapiens calcium/calmodulin-dependent protein kinase IV (CAMK4) mRNA
4544	17279		2.38	0.0E+00	L35485.1	NT	Homo sapiens diuronate sulphate sulphatase (DS) gene, complete cds
4546	17281	29910	12.72	0.0E+00	7662091	NT	Homo sapiens KIAA0390 gene product (KIAA0390), mRNA
4546	17281	29911	12.72	0.0E+00	7662091	NT	Homo sapiens KIAA0390 gene product (KIAA0390), mRNA
4563	17298	29925	0.96	0.0E+00	AF143314.1	NT	Homo sapiens PTEN (PTEN) gene, exons 3 through 5
4596	17301	29928	10.33	0.0E+00	AJ245418.1	NT	Homo sapiens mRNA for G7c protein (G7c gene located in the class III region of the major histocompatibility complex)
4596	17301	29929	10.33	0.0E+00	AJ245418.1	NT	Homo sapiens mRNA for G7c protein (G7c gene located in the class III region of the major histocompatibility complex)
4581	17316		1.68	0.0E+00	AA174072.1	EST_HUMAN	zfp18508.s1 Stratiotes fetal retina 937202 Homo sapiens cDNA clone IMAGE:800854 3'
4583	17318		1.46	0.0E+00	7657410	NT	Homo sapiens cdz (cdz Oatzen-m, Drosophila) homolog 1 (ODZ1), mRNA
4585	17320		3.16	0.0E+00	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
4586	17321	29947	1.04	0.0E+00	H92741.1	EST_HUMAN	y82501.s1 Soares phaeol gland_N3HPG Homo sapiens cDNA clone IMAGE:231721 3'
4586	17321	29948	1.04	0.0E+00	H92741.1	EST_HUMAN	y82501.s1 Soares phaeol gland_N3HPG Homo sapiens cDNA clone IMAGE:231721 3'
4587	17322	29949	2.8	0.0E+00	AF184110.1	NT	Homo sapiens cyclophilin-related protein (NKTR) gene, complete cds
4588	17323	29950	4.94	0.0E+00	AL163300.2	NT	Homo sapiens chromosome 21 segment HS21C100
4589	17324		1.66	0.0E+00	AS037521.1	NT	Homo sapiens gene for natriuretic protein, partial cds
4598	17331	29958	1.53	0.0E+00	4557687	NT	Homo sapiens keratin 18 (KRT18) mRNA
4596	17331	29959	1.53	0.0E+00	4557687	NT	Homo sapiens keratin 18 (KRT18) mRNA
4597	17332	29960	1.52	0.0E+00	AF153819.1	NT	Homo sapiens inwardly-rectifying potassium channel Kir2.1 (KCNJ2) gene, exon 2 and complete cds
4597	17332	29961	1.52	0.0E+00	AF153819.1	NT	Homo sapiens inwardly-rectifying potassium channel Kir2.1 (KCNJ2) gene, exon 2 and complete cds

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4598	17333	29902	1.5	0.0E+00	AF167441.1	NT	Mus musculus E-cadherin binding protein E7 mRNA, complete cds
4605	17340	29970	1.22	0.0E+00	AB028970.1	NT	Homo sapiens mRNA for KIAA1047 protein, partial cds
4605	17340	29971	1.22	0.0E+00	AB028970.1	NT	Homo sapiens mRNA for KIAA1047 protein, partial cds
4611	17346	29979	5.25	0.0E+00	Y18890.1	NT	Human endogenous retrovirus type K (HERV-K), gag, pol and env genes
4617	17352	29987	1.06	0.0E+00	AA418246.1	EST_HUMAN	z98907.s1 Soares_NIH-MIPu_S1 Homo sapiens cDNA clone IMAGE:767605 3'
4624	17359		2.27	0.0E+00	AF066841.1	NT	Homo sapiens truncated tenascin XB (TNXB) gene, partial cds and TNXA gene recombination breakpoint region
4629	17364	29998	1.09	0.0E+00	AL163278.2	NT	Homo sapiens chromosome 21 segment HS21C078
4629	17364	29999	1.06	0.0E+00	AL163278.2	NT	Homo sapiens chromosome 21 segment HS21C078
4630	17365	30000	2.72	0.0E+00	AB037820.1	NT	Homo sapiens mRNA for KIAA1399 protein, partial cds
4630	17365	30001	2.72	0.0E+00	AB037820.1	NT	Homo sapiens mRNA for KIAA1399 protein, partial cds
4631	17366	30002	2.67	0.0E+00	M74099.1	NT	Human displacement protein (CCAT) mRNA
4635	17370	30005	1.84	0.0E+00	6453812	NT	Homo sapiens butyrophilin, subfamily 2, member A2 (BTN2A2), mRNA
4635	17370	30006	1.84	0.0E+00	6453812	NT	Homo sapiens butyrophilin, subfamily 2, member A2 (BTN2A2), mRNA
4635	17370	30008	0.82	0.0E+00	T56945.1	EST_HUMAN	ye83g04.12 Stratagene fetal spleen (#637205) Homo sapiens cDNA clone IMAGE:68310 5'
4636	12650	25594	0.82	0.0E+00	T56945.1	EST_HUMAN	ye83g04.12 Stratagene fetal spleen (#637205) Homo sapiens cDNA clone IMAGE:68310 5'
4639	17373		1.31	0.0E+00	BE278730.1	EST_HUMAN	60116893F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3505521 5'
4660	17384	30029	1.33	0.0E+00	U56651.1	NT	Mus musculus neurophilin 1 (Nuph1) gene, large exon and 3' end of the intron, and partial cds
4665	17389	30033	6.87	0.0E+00	M80902.1	NT	Human AHNK nucleoprotein mRNA, 5' end
4668	17402	30036	2.23	0.0E+00	M80197.1	NT	Human haptoglobin and heptoglobin-related protein (HP and HPR) genes, complete cds
4668	17402	30037	2.23	0.0E+00	M80197.1	NT	Human haptoglobin and heptoglobin-related protein (HP and HPR) genes, complete cds
4671	17405	30040	1.9	0.0E+00	AF184110.1	NT	Homo sapiens cyclophilin-related protein (NKTIR) gene, complete cds
4673	17407	30042	2.02	0.0E+00	7662181	NT	Homo sapiens KIAA0563 gene product (KIAA0563), mRNA
4680	17414	30049	0.95	0.0E+00	U07593.1	NT	Human proto-oncogene tyrosine-protein kinase (ABL) gene, exon 1a and exons 2-10, complete cds
4681	17415	30050	0.97	0.0E+00	S71446.1	NT	SCN1A-brain type I sodium channel alpha-subunit (IIIS5 transmembrane region) [human, placenta, Genomic, 1556 nt]
4681	17415	30051	0.97	0.0E+00	S71446.1	NT	SCN1A-brain type I sodium channel alpha-subunit (IIIS5 transmembrane region) [human, placenta, Genomic, 1556 nt]
4692	17426		1.45	0.0E+00	X58487.1	NT	Human CYP2D7AP pseudogene for cytochrome P450 2D8
4701	17435	30065	1.05	0.0E+00	7304922	NT	Homo sapiens bromodomain adjacent to zinc finger domain, 2B (BAZ2B), mRNA
4701	17435	30066	1.05	0.0E+00	7304922	NT	Homo sapiens bromodomain adjacent to zinc finger domain, 2B (BAZ2B), mRNA
4709	17441	30073	1.4	0.0E+00	AF026801.1	NT	Homo sapiens alpha-3 type IX collagen (COL9A3) gene, promoter region, and exons 1-26
4712	17444	30076	0.94	0.0E+00	7019320	NT	Homo sapiens protein0008 (AD013), mRNA

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## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4712	17444	30077	0.84	0.0E+00	7018320	NT	Homo sapiens protein0008 (AD013), mRNA
4735	17467	30103	1.88	0.0E+00	AW444637.1	EST_HUMAN	U1-H-B13-gly-c-04-0-U1.s1 NC1 CGAP Sub5 Homo sapiens cDNA clone IMAGE:2733294 3'
4740	17472		1.82	0.0E+00	AF083242.1	NT	Homo sapiens HSPC024-iso mRNA, complete cds
4750	17482		2.28	0.0E+00	M65189.1	NT	Human connexin 43 processed pseudogene
4790	17521		2.79	0.0E+00	AF240796.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
4794	17525	30147	2.02	0.0E+00	X57205.1	NT	M.fascicularis mRNA for metalloproteinase-like, disintegrin-like protein, IVa
4796	17527	30149	1.11	0.0E+00	AF084479.1	NT	Homo sapiens Williams-Beuren syndrome deletion transcript 9 (WBSOR9) mRNA, complete cds
4797	17528	30150	1.90	0.0E+00	AF097416.1	NT	Mus musculus zinc finger transcription factor Kaiso mRNA, complete cds
4798	17529	30151	3.01	0.0E+00	4503766	NT	Homo sapiens fragile X mental retardation 2 (FMR2) mRNA
4800	17531	30153	13.57	0.0E+00	4885048	NT	Homo sapiens actin, alpha, cardiac muscle (ACTC), mRNA
4801	17532	30154	1.04	0.0E+00	P52740	SWISSPROT	ZINC FINGER PROTEIN 132
4805	17536	30159	5.7	0.0E+00	8623080	NT	Homo sapiens hypothetical protein FLJ20073 (FLJ20073), mRNA
4809	17540	30163	0.97	0.0E+00	7681979	NT	Homo sapiens KIAA0187 gene product (KIAA0187), mRNA
4810	17541	30164	1.84	0.0E+00	M94081.1	NT	Human Tcr-C-delta gene, exons 1-4; Tcr-V-delta gene, exons 1-2; T-cell receptor alpha (Tcr-alpha) gene, J1-J61 segments; and Tcr-C-alpha gene, exons 1-4
4810	17541	30165	1.84	0.0E+00	M94081.1	NT	Human Tcr-C-delta gene, exons 1-4; Tcr-V-delta gene, exons 1-2; T-cell receptor alpha (Tcr-alpha) gene, J1-J61 segments; and Tcr-C-alpha gene, exons 1-4
4812	17543	30167	1.44	0.0E+00	X94628.1	NT	H. sapiens MeCP-2 gene
4812	17543	30168	1.44	0.0E+00	X94628.1	NT	H. sapiens MeCP-2 gene
4815	17546	30171	2.98	0.0E+00	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
4823	17554	30176	1.17	0.0E+00	5032150	NT	Homo sapiens TATA box binding protein (TBP)-associated factor, RNA polymerase II, 1, 28kD (TAF21) mRNA
4830	17561	30183	1.08	0.0E+00	X92841.1	NT	H. sapiens MIGA gene
4832	17563	30185	1.91	0.0E+00	4585642	NT	Homo sapiens zinc finger protein (KIAA0412) mRNA
4833	17584	30186	1.81	0.0E+00	AB014633.1	NT	Homo sapiens mRNA for KIAA0633 protein, partial cds
4834	17585	30187	2.24	0.0E+00	6677848	NT	Mus musculus zinc finger protein interacting with K protein 1 (Zik1), mRNA
4835	17586	30188	0.95	0.0E+00	5174590	NT	Homo sapiens meningioma expressed antigen 6 (colloid-coil proline-rich) (MGEA6), mRNA
4836	17567	30189	1.19	0.0E+00	4758106	NT	Homo sapiens desmoplakin (DPI, DPII) (DSP) mRNA
4838	17569	30191	1.81	0.0E+00	7705548	NT	Homo sapiens zinc-finger DNA-binding protein (HUM/HOXY1), mRNA
4842	17572	30193	12.62	0.0E+00	AF055086.1	NT	Homo sapiens MHC class 1 region
4844	17574		3.47	0.0E+00	4505508	NT	Homo sapiens oploid receptor, delta 1 (OPRD1) mRNA
4845	17575	30199	2.39	0.0E+00	AF091711.1	NT	Homo sapiens splice variant AKAP350 mRNA, partial cds
4858	17587	30210	1.07	0.0E+00	D63592.1	NT	Homo sapiens COL4A6 gene for $\alpha 2(V)$ collagen, exon 44 and partial cds

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4890	17589	30212	1.88	0.0E+00	4503884	NT	Homo sapiens farnesyl diphosphate synthase (farnesyl pyrophosphate synthetase, dimethylallyltransferase, geranyltransferase) (FDPs) mRNA
4885	17224	28852	1.03	0.0E+00	4508952	NT	Homo sapiens sialyltransferase 8 (alpha-N-acetylneuraminatase: alpha-2,8-sialyltransferase, GD3 synthase) (SIAT8) mRNA
4875	17602	30224	3.09	0.0E+00	AB000625.1	NT	Homo sapiens mRNA for KIAA0287 gene, partial cds
4875	17602	30225	3.09	0.0E+00	AB000625.1	NT	Homo sapiens mRNA for KIAA0287 gene, partial cds
4885	17612	30232	0.95	0.0E+00	AB026888.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
4890	17626	30243	1.45	0.0E+00	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
4906	17633	30248	1.02	0.0E+00	AW452728.1	EST_HUMAN	U1-H-B13-4v-1-02-0-U1, s1 NCL_CGAP_Sub5 Homo sapiens cDNA clone IMAGE:3068691 3'
4909	17637	30251	1.81	0.0E+00	89222926	NT	Homo sapiens hypothetical protein FLJ11190 (FLJ11190), mRNA
4912	17640	30255	1.09	0.0E+00	4502398	NT	Homo sapiens beaded filament structural protein 1, filensin (BFSP1) mRNA
4915	17643		4.69	0.0E+00	U14967.1	NT	Human ribosomal protein L21 mRNA, complete cds
4924	17652		2.95	0.0E+00	BE408963.1	EST_HUMAN	801303728F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3638118 5'
4928	17656	30268	3.18	0.0E+00	4758199	NT	Homo sapiens desmoglein (DPI, DPII) (DSP) mRNA
4933	17661	30271	1.15	0.0E+00	7682401	NT	Homo sapiens KIAA0952 protein (KIAA0952), mRNA
4938	17666	30274	1.01	0.0E+00	AB028996.1	NT	Homo sapiens mRNA for KIAA1043 protein, partial cds
4947	17674	30283	2.34	0.0E+00	8923441	NT	Homo sapiens hypothetical protein FLJ20477 (FLJ20477), mRNA
4947	17674	30284	2.34	0.0E+00	8923441	NT	Homo sapiens hypothetical protein FLJ20477 (FLJ20477), mRNA
4958	17683	30291	0.81	0.0E+00	AA801246.1	EST_HUMAN	no14g09.s1 NCL_CGAP_Phet1 Homo sapiens cDNA clone IMAGE:1100704 3' similar to TRE239140 E239140 SPALT PROTEIN ;
4958	17683	30292	0.81	0.0E+00	AA801246.1	EST_HUMAN	no14g09.s1 NCL_CGAP_Phet1 Homo sapiens cDNA clone IMAGE:1100704 3' similar to TRE239140 E239140 SPALT PROTEIN ;
4958	17683	30293	0.81	0.0E+00	AA801246.1	EST_HUMAN	no14g09.s1 NCL_CGAP_Phet1 Homo sapiens cDNA clone IMAGE:1100704 3' similar to TRE239140 E239140 SPALT PROTEIN ;
4961	17686	30296	1.11	0.0E+00	AF161463.1	NT	Homo sapiens HSPC114 mRNA, complete cds
4961	17686	30296	1.11	0.0E+00	AF161463.1	NT	Homo sapiens HSPC114 mRNA, complete cds
4973	13019	25061	0.71	0.0E+00	AF195638.1	NT	Homo sapiens DNA mismatch repair protein (MLH3) gene, complete cds
4976	17689		0.84	0.0E+00	AL050253.1	NT	H. sapiens mRNA similar to D29763 mouse mRNA for seizure-related gene product 6, Shares domains with BMP6, Tolloid, Sushi repeat proteins
4985	17708	30312	1.63	0.0E+00	AF016705.1	NT	Homo sapiens E6-AP ubiquitin-protein ligase (UBESA) gene, exon 3
4986	17709	30313	1.5	0.0E+00	Y19186.1	NT	Mus musculus mRNA for ezonin, short spliced variant (ecz gene)
4986	17709	30314	1.6	0.0E+00	Y19186.1	NT	Mus musculus mRNA for ezonin, short spliced variant (ecz gene)
4994	17717		1.26	0.0E+00	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009



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4997	17720		28.03	0.0E+00	D50957.1	NT	Homo sapiens geminin-cytoplasmic actin (ACTGP3) pseudogene
5001	17724	30326	0.97	0.0E+00	AA084272.1	EST_HUMAN	znc03g10.11 Stratiogene hNT neuron (#837233) Homo sapiens cDNA clone IMAGE:548402 5'
5001	17724	30327	0.97	0.0E+00	AA084272.1	EST_HUMAN	znc03g10.11 Stratiogene hNT neuron (#837233) Homo sapiens cDNA clone IMAGE:548402 5'
5012	16824	28553	0.95	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
5012	16824	28554	0.95	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
5026	17747	30359	3	0.0E+00	X52988.1	NT	Bacillus amyloquelactans sacB gene for levansucrase (EC 2.4.1.10)
5042	17761	30375	1.04	0.0E+00	AF240635.1	NT	Homo sapiens vascular endothelial cadherin 2 mRNA, complete cds
5042	17761	30376	1.04	0.0E+00	AF240635.1	NT	Homo sapiens vascular endothelial cadherin 2 mRNA, complete cds
5045	17764	30380	1.55	0.0E+00	7657074	NT	Homo sapiens ecotropic viral integration site 2A (EVI2A), mRNA
5045	17764	30381	1.55	0.0E+00	7657074	NT	Homo sapiens ecotropic viral integration site 2A (EVI2A), mRNA
5049	17768	30387	1.11	0.0E+00	AL163281.2	NT	Homo sapiens chromosome 21 segment HS21C081
5050	17769	30388	14.05	0.0E+00	11421001	NT	Homo sapiens HEF like Protein (HEFL), mRNA
5052	17771	30389	1.03	0.0E+00	4557362	NT	Homo sapiens PR domain containing 1, with ZNF domain (PRDM1) mRNA
5056	17775	30391	2.75	0.0E+00	Y12477.1	NT	Homo sapiens putative GPR37 gene, exon 2
5058	17775	30392	2.75	0.0E+00	Y12477.1	NT	Homo sapiens putative GPR37 gene, exon 2
5058	17777	30394	1.07	0.0E+00	Y08032.1	NT	Human endogenous retrovirus-K, LTR U6 and gag gene
5078	17798	30414	1.01	0.0E+00	8823822	NT	Homo sapiens potassium inwardly-rectifying channel, subfamily J, member 18 (KCNJ18), mRNA
5078	17798	30415	1.01	0.0E+00	8823822	NT	Homo sapiens potassium inwardly-rectifying channel, subfamily J, member 18 (KCNJ18), mRNA
5081	17800	30417	0.78	0.0E+00	7706245	NT	Homo sapiens 4F2 light chain (LOC51597), mRNA
5081	17800	30418	0.78	0.0E+00	7706245	NT	Homo sapiens 4F2 light chain (LOC51597), mRNA
5088	17807	30423	2.69	0.0E+00	7657008	NT	Homo sapiens deleted in bladder cancer chromosome region candidate 1 (DBCCR1), mRNA
5097	17816	30433	2.05	0.0E+00	AB011131.1	NT	Homo sapiens mRNA for KIAA0559 protein, partial cds
5109	17827	30444	1.23	0.0E+00	D49802.1	NT	Mus musculus mRNA for leucine-rich repeat protein, partial cds
5110	17828	30446	1.14	0.0E+00	AF227534.1	NT	Rattus norvegicus multidomain presynaptic cytomatrix protein Piccolo mRNA, complete cds, long splice variant
5111	17829	30446	1.88	0.0E+00	AF227534.1	NT	Rattus norvegicus multidomain presynaptic cytomatrix protein Piccolo mRNA, complete cds, long splice variant
5112	17830	30447	0.99	0.0E+00	AF245702.1	NT	Homo sapiens toll-like receptor 7 (TLR7) mRNA, complete cds
5115	17833	30449	6.53	0.0E+00	4505066	NT	Homo sapiens microtubule-associated protein 2 (MAP2) mRNA
5116	17834	30450	1.5	0.0E+00	6006002	NT	Homo sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 2A (GRIN2A) mRNA
5116	17834	30451	1.5	0.0E+00	6006002	NT	Homo sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 2A (GRIN2A) mRNA
5117	17835	30452	1.6	0.0E+00	AW955819.1	EST_HUMAN	EST367889 MAGE resequences, MAGD Homo sapiens cDNA
5119	17837		1.31	0.0E+00	AB040946.1	NT	Homo sapiens mRNA for KIAA1513 protein, partial cds
5126	17844		1.12	0.0E+00	AJ010179.1	NT	Homo sapiens gabbr1 receptor gene, exon 6

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5139	17857	30473	5.57	0.0E+00	AB027013.1	NT	Homo sapiens mRNA for Nucleosome Assembly Protein 1-like 2, complete cds
5150	17861	30477	1.19	0.0E+00	AB033356.1	NT	Homo sapiens mRNA for neuradin 1-alpha protein, complete cds
5151	17868	30481	1.18	0.0E+00	AB028040.1	NT	Homo sapiens mRNA for KIAA1117 protein, partial cds
5154	17871		1.08	0.0E+00	M91803.1	NT	Human sodium channel mRNA
5155	17872	30484	1.37	0.0E+00	5454013	NT	Homo sapiens ring finger protein 16 (RNF16), mRNA
5162	17893		3.44	0.0E+00	AF063083.1	NT	Homo sapiens acorninase (AC02) gene, nuclear gene encoding mitochondrial protein, exon 15
5172	17981	30495	2.52	0.0E+00	AF137286.1	NT	Homo sapiens keratin 12 (KRT12) gene, complete cds
5172	17981	30498	2.52	0.0E+00	AF137286.1	NT	Homo sapiens keratin 12 (KRT12) gene, complete cds
5192	18000	30623	1.29	0.0E+00	AI824954.1	EST_HUMAN	wp06g08.x1 NCI_CGAP_Kd12 Homo sapiens cDNA clone IMAGE:2494094 3'
5195	18003	30626	1.77	0.0E+00	9256579	NT	Homo sapiens probocadherin alpha 13 (PCDH13), mRNA
5209	18017	30639	3.81	0.0E+00	BE831080.1	EST_HUMAN	RC3-GN0076-310800-013-503 GN0078 Homo sapiens cDNA
5213	18021	30644	3	0.0E+00	AF182034.1	NT	Homo sapiens polycystic kidney disease-like 2 protein (PKDL2) mRNA, complete cds
5220	18027	30652	1.66	0.0E+00	AF182034.1	NT	Homo sapiens polycystic kidney disease-like 2 protein (PKDL2) mRNA, complete cds
5220	18027	30653	1.66	0.0E+00	X56163.1	NT	H. sapiens immunoglobulin heavy chain gene, variable region
5239	18104	30763	6.56	0.0E+00	BE875488.1	EST_HUMAN	7f10c06.x1 NCI_CGAP_GLL1 Homo sapiens cDNA clone IMAGE:3294260 3'
5300	18105	30764	1.75	0.0E+00	BE220763.1	EST_HUMAN	h89a02.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3294260 3'
5301	18108	30765	1.93	0.0E+00	BE784412.1	EST_HUMAN	P42894 HYPOTHETICAL PROTEIN KIAA0084. ;
5301	18108	30766	1.93	0.0E+00	BE784412.1	EST_HUMAN	601589422F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3943804 5'
						EST_HUMAN	601589422F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3943804 5'
5302	18107	30767	0.91	0.0E+00	AI189142.1	EST_HUMAN	qd04a04.x1 Soares_plicaria_81a0weeks_2NbpP8a0W Homo sapiens cDNA clone IMAGE:1722702 3'
5306	18111	30770	5.17	0.0E+00	M29008.1	NT	similar to SW:T2D3_DROME P49846 TRANSCRIPTION INITIATION FACTOR TF1D 85 KD SUBUNIT ;
5319	25066	30780	4.68	0.0E+00	11421038	NT	Homo sapiens eosinophil peroxidase (EPP) gene, exon 7
5329	18132		7.18	0.0E+00	BF065962.1	EST_HUMAN	Homo sapiens Sp4 transcription factor (SP4), mRNA
5330	18133	30791	0.73	0.0E+00	AU134406.1	EST_HUMAN	602118928F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:4276254 5'
5330	18133	30792	0.73	0.0E+00	AU134406.1	EST_HUMAN	AU134408 OVARC1 Homo sapiens cDNA clone OVARC1001894 5'
5335	18138	30789	1	0.0E+00	BE539857.1	EST_HUMAN	AU134408 OVARC1 Homo sapiens cDNA clone OVARC1001894 5'
5344	18147	30828	1.07	0.0E+00	BE262784.1	EST_HUMAN	601061486F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3447839 5'
5348	18151	30831	1.69	0.0E+00	BF526328.1	EST_HUMAN	601105891F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2986310 5'
5348	18151	30832	1.69	0.0E+00	BF526328.1	EST_HUMAN	602071372F1 NCI_CGAP_Bim84 Homo sapiens cDNA clone IMAGE:4214272 5'
5367	19491	32513	1.82	0.0E+00	4557364	EST_HUMAN	602071372F1 NCI_CGAP_Bim84 Homo sapiens cDNA clone IMAGE:4214272 5'
5370	18171	30858	0.91	0.0E+00	AB007635.1	NT	Homo sapiens Bloom syndrome (BLM) mRNA
						NT	Homo sapiens mRNA for KIAA0466 protein, partial cds

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6370	18171	30859	0.91	0.0E+00	AB007935.1	NT	Homo sapiens mRNA for KIAA0496 protein, partial cds
5374	18174	30863	4.85	0.0E+00	AF257737.1	NT	Homo sapiens ciliary dynein heavy chain 9 (DNAH9) mRNA, complete cds
5374	18174	30864	4.85	0.0E+00	AF257737.1	NT	Homo sapiens ciliary dynein heavy chain 9 (DNAH9) mRNA, complete cds
5387	18187	30878	1.06	0.0E+00	D26635.1	NT	Human gene for dihydropyrimidine succinyltransferase, complete cds (exon 1-15)
5387	18187	30879	1.06	0.0E+00	D26635.1	NT	Human gene for dihydropyrimidine succinyltransferase, complete cds (exon 1-15)
5401	18201	30906	1.88	0.0E+00	11420819	NT	Homo sapiens olfactory receptor, family 2, subfamily F, member 1 (OR2F1), mRNA
5407	18206	30912	0.81	0.0E+00	Z38133.1	NT	H. sapiens mRNA for myosin
5420	18225	30938	0.78	0.0E+00	D61564.1	EST_HUMAN	HUM418D05B Clontech human fetal brain polyA+ mRNA (#8535) Homo sapiens cDNA clone GEN-418D05
5426	18225	30937	0.78	0.0E+00	D61564.1	EST_HUMAN	HUM418D05B Clontech human fetal brain polyA+ mRNA (#8535) Homo sapiens cDNA clone GEN-418D05
5429	18228	30941	2.55	0.0E+00	BF529631.1	EST_HUMAN	602042322F1 NCI_CGAP_Bm87 Homo sapiens cDNA clone IMAGE:4179988 5'
5429	18228	30942	2.55	0.0E+00	BF529631.1	EST_HUMAN	602042322F1 NCI_CGAP_Bm87 Homo sapiens cDNA clone IMAGE:4179988 5'
5434	18243	30946	2.92	0.0E+00	BF313139.1	EST_HUMAN	601897658F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4126815 5'
5445	18244	31132	4.37	0.0E+00	11434392	NT	Homo sapiens calcium channel, voltage-dependent, alpha 1G subunit (CACNA1G), mRNA
5477	18276	31171	1.15	0.0E+00	BE280777.1	EST_HUMAN	601150252F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3502908 5'
5486	18285	31108	3.51	0.0E+00	AW867316.1	EST_HUMAN	MR0-SN0037-030400-001-107 SN0037 Homo sapiens cDNA
5500	18298	31108	2.33	0.0E+00	BE292889.1	EST_HUMAN	MR0-SN0037-030400-001-107 SN0037 Homo sapiens cDNA clone IMAGE:2987903 5'
5500	18298	31197	2.33	0.0E+00	BE292889.1	EST_HUMAN	601105291F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2987903 5'
5521	18319	31219	1.51	0.0E+00	11420819	NT	Homo sapiens olfactory receptor, family 2, subfamily F, member 1 (OR2F1), mRNA
5521	18319	31220	1.51	0.0E+00	11420819	NT	Homo sapiens olfactory receptor, family 2, subfamily F, member 1 (OR2F1), mRNA
5528	18326	31228	4.35	0.0E+00	AF064254.1	NT	Homo sapiens very long-chain acyl-CoA synthetase homolog 1 mRNA, complete cds
5528	18326	31229	4.35	0.0E+00	AF064254.1	NT	Homo sapiens very long-chain acyl-CoA synthetase homolog 1 mRNA, complete cds
5535	18333	31239	2.95	0.0E+00	AJ224639.1	NT	Homo sapiens Surf-5 and Surf-6 genes
5535	18333	31240	2.95	0.0E+00	AJ224639.1	NT	Homo sapiens Surf-5 and Surf-6 genes
5568	18363	31271	0.61	0.0E+00	A1198515.1	EST_HUMAN	qf04g10.x1 Scores placenta_806weeks_2NHHP86GW Homo sapiens cDNA clone IMAGE:1757730 3'
5570	18367	31277	6.98	0.0E+00	M85719.1	EST_HUMAN	similar to SW-CADC_HUMAN P56288 BRAIN-CADHERIN PRECURSOR:
5577	18374	31286	4.83	0.0E+00	AW405472.1	EST_HUMAN	EST02238 Fetal brain, Stratagene (cat#330206) Homo sapiens cDNA clone HFBGM48
5590	18386	31296	1.25	0.0E+00	Z26288.1	NT	UI-HF-BL0-act-d-02-q-UJI-1 NIH_MGC_37 Homo sapiens cDNA clone IMAGE:3061658 5'
5601	18398	31306	1.94	0.0E+00	AW361877.1	EST_HUMAN	H. sapiens isoform 1 gene for L-type calcium channel, exon 14 strand 15
5601	18398	31307	1.94	0.0E+00	AW361877.1	EST_HUMAN	PM3-CT0263-091299-007-h05 CT0263 Homo sapiens cDNA
5601	18398	31308	1.94	0.0E+00	AW361877.1	EST_HUMAN	PM3-CT0263-091299-007-h05 CT0263 Homo sapiens cDNA
5601	18398	31308	1.94	0.0E+00	AW361877.1	EST_HUMAN	PM3-CT0263-091299-007-h05 CT0263 Homo sapiens cDNA
5605	18401	31315	2.55	0.0E+00	U36261.1	NT	Human beta-prime-adaptin (BAM22) gene, exon 13

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5636	18431	31344	1.03	0.0E+00	AB046961.1	NT	Homo sapiens mRNA for KIAA1841 protein, partial cds
5691	18485	31404	1.56	0.0E+00	AJ006345.1	NT	Homo sapiens KVLQT1 gene
5691	18485	31405	1.56	0.0E+00	AJ006345.1	NT	Homo sapiens KVLQT1 gene
5699	18483	31416	1.19	0.0E+00	AJ207616.1	EST_HUMAN	HA2881 Human fetal liver cDNA library Homo sapiens cDNA
5717	18509	31430	6.23	0.0E+00	11416801	NT	Homo sapiens protocadherin beta 2 (PCDH2), mRNA
5722	18514	31433	1.21	0.0E+00	BE791173.1	EST_HUMAN	601594032F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3938551 5'
5731	18523	31444	1.13	0.0E+00	9999943	NT	Homo sapiens amiloride-sensitive cation channel 1, neuronal (degenerin) (ACCN1), mRNA
5732	18524	31445	6.59	0.0E+00	BE560082.1	EST_HUMAN	601345141F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3677843 5'
5733	18526	31446	1.67	0.0E+00	10048478	NT	Homo sapiens amiloride-sensitive cation channel 1, neuronal (degenerin) (ACCN1), mRNA
5734	18526	31447	4.05	0.0E+00	U86981.1	NT	Human L-type calcium channel beta-1 subunit (CACNLB1) gene, exon 13B and isoform beta-1B, complete cds
5734	18526	31448	4.05	0.0E+00	U86981.1	NT	Human L-type calcium channel beta-1 subunit (CACNLB1) gene, exon 13B and isoform beta-1B, complete cds
5752	18544	31488	2.28	0.0E+00	BF338835.1	EST_HUMAN	602036272F1 NCI_CGAP_Brr64 Homo sapiens cDNA clone IMAGE:4184321 5'
5758	18548	31489	1.03	0.0E+00	AF142621.1	NT	Homo sapiens calcium channel gamma 5 subunit (CACNG5) gene, exon 4 and complete cds
5757	18549	31470	3.06	0.0E+00	BE273983.1	EST_HUMAN	601104462F1 NIH_MGC_14 Homo sapiens cDNA clone IMAGE:3347463 5'
5766	18560	31486	0.88	0.0E+00	BE503096.1	EST_HUMAN	h283d11.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3214581 3' similar to TR:Q62084 Q62084
5773	18564	31493	1.57	0.0E+00	BF569805.1	EST_HUMAN	PHOSPHOLIPASE C NEIGHBORING ;
5778	18569	31497	1.21	0.0E+00	AA454842.1	EST_HUMAN	602185852F1 NIH_MGC_45 Homo sapiens cDNA clone IMAGE:4310076 5'
5811	18600	31528	2.38	0.0E+00	AF217289.1	NT	z09d06.s1 Sources NIH-IMPJ S1 Homo sapiens cDNA clone IMAGE:811883 3'
5813	18602	31530	1.76	0.0E+00	BE828144.1	EST_HUMAN	Homo sapiens cadherin 20 (CDH20) mRNA, complete cds
5818	18607	31535	2.27	0.0E+00	BE969636.1	EST_HUMAN	RC8-ET0027-210600-022-G10 ET0027 Homo sapiens cDNA
5831	18620	31552	0.55	0.0E+00	BE673986.1	EST_HUMAN	601845287F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:3930453 5'
5831	18620	31553	0.55	0.0E+00	BE673986.1	EST_HUMAN	601845287F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:3278540 3' similar to SW:DAX1_HUMAN
5836	18625	31559	1.14	0.0E+00	AW276760.1	EST_HUMAN	7472e11.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3278540 3' similar to SW:DAX1_HUMAN
5847	18634	31571	1.16	0.0E+00	BF031742.1	EST_HUMAN	P51843 ORPHAN NUCLEAR RECEPTOR DAX-1, [1];
5847	18634	31572	1.16	0.0E+00	BF031742.1	EST_HUMAN	7472e11.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3278540 3' similar to SW:DAX1_HUMAN
5859	18646	31587	0.58	0.0E+00	AW470846.1	EST_HUMAN	P51843 ORPHAN NUCLEAR RECEPTOR DAX-1, [1];
5872	18659	31599	0.77	0.0E+00	BF155670.1	EST_HUMAN	P51843 ORPHAN NUCLEAR RECEPTOR DAX-1, [1];
							xp6503.x1 NCI_CGAP_Ov39 Homo sapiens cDNA clone IMAGE:2745245 3' similar to TR:P76335 P76335
							GUANYLATE KINASE ASSOCIATED PROTEIN, [1];
							601558060F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:3827775 5'
							601558060F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:3827775 5'
							h234d06.x1 NCI_CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2875598 3' similar to TR:Q821N3
							Q821N3 MYOSIN-RHO GAP PROTEIN, MYR 7, [1];
							QV4-HT0894-280900-399-a10 HT0894 Homo sapiens cDNA

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5872	18659	31600	0.77	0.0E+00	BF155670.1	EST_HUMAN	QV4-HT0884-280800-399-10 HT0894 Homo sapiens cDNA
5878	18684	31604	3.22	0.0E+00	W33069.1	EST_HUMAN	zc08h06.r1 Soares parathyroid tumor_NbHPA Homo sapiens cDNA clone IMAGE:321755 5'
5878	18684	31605	3.22	0.0E+00	W33069.1	EST_HUMAN	zc08h06.r1 Soares parathyroid tumor_NbHPA Homo sapiens cDNA clone IMAGE:321755 5'
5878	18685		2.51	0.0E+00	AF012618.1	NT	Homo sapiens familial mental retardation protein 2 (FMR2) gene, exon 14
5882	18686	31609	3.33	0.0E+00	BE280197.1	EST_HUMAN	601158515F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3505323 5'
5890	18675	31620	2.6	0.0E+00	BE388610.1	EST_HUMAN	601512630F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3914238 5'
5905	18690	31639	0.6	0.0E+00	AW752848.1	EST_HUMAN	IL3-CT0220-111189-028-E04 CT0220 Homo sapiens cDNA
5908	18682	31641	1.1	0.0E+00	11433071	NT	Homo sapiens KIAA0735 gene product; synaptic vesicle protein 2B homolog (KIAA0735), mRNA
5908	18682	31642	1.1	0.0E+00	11433071	NT	Homo sapiens KIAA0735 gene product; synaptic vesicle protein 2B homolog (KIAA0735), mRNA
5909	18693	31643	0.88	0.0E+00	BE901608.1	EST_HUMAN	601677735F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3960200 5'
5909	18693	31644	0.88	0.0E+00	BE901608.1	EST_HUMAN	601677735F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3960200 5'
5909	18693	31645	0.88	0.0E+00	BE901608.1	EST_HUMAN	601677735F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3960200 5'
5923	25081	31661	10.66	0.0E+00	9789886	NT	Homo sapiens potassium voltage-gated channel, Shal-related subfamily, member 2 (KCND2), mRNA
5926	18710	31664	1.2	0.0E+00	AA193508.1	EST_HUMAN	zr40h01.r1 Soares_NbHMPu_S1 Homo sapiens cDNA clone IMAGE:665905 5' similar to SW:YY05_HUMAN P42894 HYPOTHETICAL MYELOID CELL LINE PROTEIN 6.;
5926	18710	31665	1.2	0.0E+00	AA193508.1	EST_HUMAN	zr40h01.r1 Soares_NbHMPu_S1 Homo sapiens cDNA clone IMAGE:665905 5' similar to SW:YY05_HUMAN P42894 HYPOTHETICAL MYELOID CELL LINE PROTEIN 5.;
5948	18730	31689	16.77	0.0E+00	U34625.1	NT	Human T cell surface glycoprotein CD-6 mRNA, complete cds
5948	18730	31690	16.77	0.0E+00	U34625.1	NT	Human T cell surface glycoprotein CD-6 mRNA, complete cds
5987	18768	31732	0.99	0.0E+00	BE258330.1	EST_HUMAN	601114823F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3355565 5'
5997	18778	31740	1.2	0.0E+00	BE156661.1	EST_HUMAN	QV0-HT0368-090200-099-609 HT0368 Homo sapiens cDNA
6007	18788	31780	0.85	0.0E+00	M38107.1	NT	Human neurofibromatosis type 1 (NF-1) mRNA, 3' end of cds
6040	18820	31781	1.32	0.0E+00	BE379007.1	EST_HUMAN	601236276F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3608490 5'
6046	18826	31787	1.39	0.0E+00	AU137772.1	EST_HUMAN	AU137772 PLACE1 Homo sapiens cDNA clone IMAGE:1007201 5'
6068	18845	31809	3.76	0.0E+00	U45982.1	NT	Human G protein-coupled receptor GPR-9-6 gene, complete cds
6094	18872	31839	4.52	0.0E+00	AA204740.1	EST_HUMAN	zq61403.r1 Strategene hNT neuron (8637233) Homo sapiens cDNA clone IMAGE:648005 5' similar to TR:G854195 G854195 LEUKOCYTE SURFACE PROTEIN.;
6095	18873	31840	3.97	0.0E+00	11545913	NT	Homo sapiens xylosyltransferase II (XT2), mRNA
6095	18873	31841	3.97	0.0E+00	11545913	NT	Homo sapiens xylosyltransferase II (XT2), mRNA
6129	18907	31875	1.14	0.0E+00	11426387	NT	Homo sapiens carboxymyosin antigen-related cell adhesion molecule 8 (CEACAM8), mRNA
6133	18911	31880	2.87	0.0E+00	BE257173.1	EST_HUMAN	601109532F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:33550922 5'
6147	18924		0.85	0.0E+00	A1686048.1	EST_HUMAN	891f10.x1 NC1_CGAP_P128 Homo sapiens cDNA clone IMAGE:2248639 3' similar to TR:Q14839 Q14839 MI-2 PROTEIN.;

Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6151	18928	31887	1.53	0.0E+00	U35930.1	NT	Human anion exchanger (AE1) gene, exons 1-20
6158	18936	31903	1.22	0.0E+00	BE797385.1	EST_HUMAN	601587971F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3942329 5'
6159	18936	31904	1.22	0.0E+00	BE797385.1	EST_HUMAN	601587971F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3942329 5'
6170	18947	31919	0.57	0.0E+00	AI198025.1	EST_HUMAN	q50b11.x1 NCI_CGAP_Bim25 Homo sapiens cDNA clone IMAGE:1859901 3' similar to TR:Q12838 Q12838
6170	18947	31920	0.57	0.0E+00	AI198025.1	EST_HUMAN	TFIIIC ALPHA SUBUNIT;
6172	18949	31921	0.85	0.0E+00	BF357123.1	EST_HUMAN	q50b11.x1 NCI_CGAP_Bim25 Homo sapiens cDNA clone IMAGE:1859901 3' similar to TR:Q12838 Q12838
6180	18957	31931	1.08	0.0E+00	11435630	NT	TFIIIC ALPHA SUBUNIT;
6189	18968	31939	0.65	0.0E+00	D55649.1	NT	MFO-HT0823-220800-102-b05 HT0823 Homo sapiens cDNA
6207	18982	31961	1.03	0.0E+00	AW178142.1	EST_HUMAN	Homo sapiens peptide transporter 3 (LOC51286), mRNA
6228	19002	31978	0.66	0.0E+00	BE674544.1	EST_HUMAN	Human mRNA for alpha mannosidase II leucine, complete cds
6232	19006	31983	1.33	0.0E+00	7682039	NT	IL3-HT0062-010898-014-A04 HT0062 Homo sapiens cDNA
6246	19020		8.59	0.0E+00	AV650020.1	EST_HUMAN	762c12.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3281302 3' similar to SW:Y176_HUMAN
6254	19028	32003	3.13	0.0E+00	AW675698.1	EST_HUMAN	Q14881 HYPOTHETICAL PROTEIN KIAA0178 ;
6257	19031	32006	6.26	0.0E+00	H01255.1	EST_HUMAN	Homo sapiens KIAA0285 gene product (KIAA0285), mRNA
6269	19042	32019	1.6	0.0E+00	X16377.1	NT	AV650020 GLC Homo sapiens cDNA clone GLCCAD09 3'
6271	19044	32021	0.65	0.0E+00	AA456375.1	EST_HUMAN	UI-HF-BL0-eco-g-12-0-UL.s1 NIH_MGC 37 Homo sapiens cDNA clone IMAGE:3068751 3'
6272	19045	32022	1.3	0.0E+00	AK12641.1	EST_HUMAN	y27b03.r1 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:149933 5'
6278	19051	32028	4.71	0.0E+00	BE795980.1	EST_HUMAN	Human gene for the light and heavy chains of myeloperoxidase
6278	19051	32029	4.71	0.0E+00	BE795980.1	EST_HUMAN	aa14607.r1 Soares NIHMFU_S1 Homo sapiens cDNA clone IMAGE:813252 5'
6282	19055	32035	0.86	0.0E+00	AW748596.1	EST_HUMAN	tz57d08.x1 NCI_CGAP_Oy45 Homo sapiens cDNA clone IMAGE:2282887 3' similar to SW:NTCS_HUMAN
6282	19055	32036	0.86	0.0E+00	AW748596.1	EST_HUMAN	P63796 SODIUM- AND CHLORIDE-DEPENDENT CREATINE TRANSPORTER 2 ;
6283	19056		0.6	0.0E+00	U77629.1	NT	601305388F1 NIH_MGC 39 Homo sapiens cDNA clone IMAGE:3630818 5'
6285	19058	32038	15.59	0.0E+00	AU119245.1	EST_HUMAN	601305388F1 NIH_MGC 39 Homo sapiens cDNA clone IMAGE:3630818 5'
6285	19058	32039	15.59	0.0E+00	AU119245.1	EST_HUMAN	MFO-BT0264-221199-002-F11 BT0264 Homo sapiens cDNA
6289	19062	32044	0.8	0.0E+00	BE780483.1	EST_HUMAN	MFO-BT0264-221199-002-F11 BT0264 Homo sapiens cDNA
6290	19063	32045	1.12	0.0E+00	X62217.1	NT	Homo sapiens Achele-Scute homologue 2 (ASCL2) gene, complete cds
6304	19076	32062	1.52	0.0E+00	A1980483.1	EST_HUMAN	AU119245 HEMBA1 Homo sapiens cDNA clone HEMBA1005360 5'
6317	19088	32072	6.91	0.0E+00	BE263153.1	EST_HUMAN	AU119245 HEMBA1 Homo sapiens cDNA clone HEMBA1005360 5'
6317	19088	32073	6.91	0.0E+00	BE263153.1	EST_HUMAN	601468712F1 NIH_MGC_87 Homo sapiens cDNA clone IMAGE:3871899 5'
							H. sapiens gamma immunoglobulin heavy chain, variable region, (13-2)
							w25607.x1 NCI_CGAP_GC08 Homo sapiens cDNA clone IMAGE:2498220 3'
							601105344F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2987963 5'
							601105344F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2987963 5'

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6355	19125	32119	0.58	0.0E+00	BF057438.1	EST_HUMAN	7K43H05.x1 NCI_CGAP_Ov18 Homo sapiens cDNA clone IMAGE:3479496 3' similar to TR:O14553 O14553
6388	19167	32157	1.89	0.0E+00	AW406348.1	EST_HUMAN	R31240_1;
6388	19157	32158	1.89	0.0E+00	AW406348.1	EST_HUMAN	UI-HF-BLQ-eco-h-02-0-UI-1 NIH_MGC_37 Homo sapiens cDNA clone IMAGE:3059631 5'
6418	19180	32184	0.79	0.0E+00	AV719444.1	EST_HUMAN	UI-HF-BLQ-eco-h-02-0-UI-1 NIH_MGC_37 Homo sapiens cDNA clone IMAGE:3059631 5'
6427	19195	32191	0.98	0.0E+00	BE898340.1	EST_HUMAN	AV719444 GLC Homo sapiens cDNA clone GLCEHC06 5'
6427	19185	32192	0.98	0.0E+00	BE898340.1	EST_HUMAN	601681150F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3951301 5'
6430	19198	32195	2.24	0.0E+00	AF190880.1	NT	601681150F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3951301 5'
6433	19201	32197	1.17	0.0E+00	11420658	NT	Homo sapiens low voltage-activated T-type calcium channel alpha 1G splice variant CavT.1a (CAONA1G) mRNA, complete cds
6440	19208	32204	7.5	0.0E+00	AW163640.1	EST_HUMAN	Homo sapiens transmembrane/transcription domain-associated protein (TRRAP), mRNA
6440	19208	32205	7.5	0.0E+00	AW163640.1	EST_HUMAN	at038108.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2784159 5' similar to
6444	19212	32208	0.97	0.0E+00	W37163.1	EST_HUMAN	TR:O16390 O16390 GT24. [3] TR:O43840 TR:O43206 ;
6444	19212	32208	0.97	0.0E+00	W37163.1	EST_HUMAN	at038108.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2784159 5' similar to
6459	19226	32226	1.08	0.0E+00	BE794893.1	EST_HUMAN	TR:O16390 O16390 GT24. [3] TR:O43840 TR:O43206 ;
6466	19233	32233	5.81	0.0E+00	BE790873.1	EST_HUMAN	at038108.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2784159 5' similar to
6467	19234	32234	0.56	0.0E+00	BE797955.1	EST_HUMAN	TR:O16390 O16390 GT24. [3] TR:O43840 TR:O43206 ;
6467	19234	32235	0.56	0.0E+00	BE797955.1	EST_HUMAN	at038108.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2784159 5' similar to
6471	19238	32238	6.95	0.0E+00	BE898113.1	EST_HUMAN	z520606.r1 Soares_fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:302626 5' similar to
6471	19238	32239	6.95	0.0E+00	BE898113.1	EST_HUMAN	SW:ZN45_HUMAN Q02386 ZINC FINGER PROTEIN 45 ;
6480	19247	32247	5.62	0.0E+00	L24463.1	NT	z520606.r1 Soares_fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:302626 5' similar to
6485	19252	32251	1.98	0.0E+00	AL163204.2	NT	SW:ZN45_HUMAN Q02386 ZINC FINGER PROTEIN 45 ;
6485	19252	32252	1.98	0.0E+00	AL163204.2	NT	601599371F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3943504 5'
6491	19258	32259	4.06	0.0E+00	6005963	NT	601597561F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3941847 5'
6494	19260	32261	4.76	0.0E+00	A1638412.1	EST_HUMAN	QV1-GN0065-140800-318-H02 GN0065 Homo sapiens cDNA
6495	19261	32262	1.36	0.0E+00	L32832.1	NT	QV1-GN0065-140800-318-H02 GN0065 Homo sapiens cDNA
6507	19272	32273	4.12	0.0E+00	AA434594.1	EST_HUMAN	601512058F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3913311 5'
6520	19286		0.99	0.0E+00	BF217200.1	EST_HUMAN	601512058F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3913311 5'
6523	19289	32283	1.82	0.0E+00	BE925975.1	EST_HUMAN	Human antigen CD27 gene, exons 1-2
							Homo sapiens chromosome 21 segment HS21C004
							Homo sapiens chromosome 21 segment HS21C004
							Homo sapiens zona pellucida glycoprotein 3A (sperm receptor) (ZP3A), mRNA
							tt31f11.x1 NCI_CGAP_G08 Homo sapiens cDNA clone IMAGE:2242413 3' similar to SW:WNT3_MOUSE
							P17553 WNT-3 PROTO-ONCOGENE PROTEIN PRECURSOR ;
							Homo sapiens zinc finger homeodomain protein (ATBF1-A) mRNA, complete cds
							z520603.r1 Soares_fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:773668 5'
							601865317F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4103693 5'
							QV3-BN0047-300800-278-c06 BN0047 Homo sapiens cDNA

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6554	19319	32325	1.11	0.0E+00	11426758	NT	Homo sapiens solute carrier family 1 (high affinity aspartate/glutamate transporter), member 6 (SLC1A6), mRNA
6554	19319	32326	1.11	0.0E+00	11426758	NT	Homo sapiens solute carrier family 1 (high affinity aspartate/glutamate transporter), member 6 (SLC1A6), mRNA
6571	19335	32346	1.6	0.0E+00	AL125928.1	EST_HUMAN	AL125928 NT2RM4 Homo sapiens cDNA clone NT2RM4002430 5'
6573	19337	32348	1.88	0.0E+00	BE701434.1	EST_HUMAN	PM2-NN0174-280700-001-H10 NN0174 Homo sapiens cDNA
6573	19337	32349	1.88	0.0E+00	BE701434.1	EST_HUMAN	PM2-NN0174-280700-001-H10 NN0174 Homo sapiens cDNA
6594	19357	32371	1.67	0.0E+00	BE142363.1	EST_HUMAN	CM0-HT0143-270989-002-008 HT0143 Homo sapiens cDNA
6614	19377	32391	1.44	0.0E+00	BE006012.1	EST_HUMAN	RC0-BN0121-280300-032-004 BN0121 Homo sapiens cDNA
6614	19377	32392	1.44	0.0E+00	BE006012.1	EST_HUMAN	RC0-BN0121-280300-032-004 BN0121 Homo sapiens cDNA
6638	19400	32415	8.38	0.0E+00	BE169131.1	EST_HUMAN	PM3-HT0520-230200-002-008 HT0520 Homo sapiens cDNA
6640	19402	32417	1.93	0.0E+00	BF085667.1	EST_HUMAN	IL5-GN0032-180900-145-007 GN0032 Homo sapiens cDNA
6678	19595	32633	3.49	0.0E+00	AA190753.1	EST_HUMAN	zp88e03.f1 Stratagene HeLa cell s3 937216 Homo sapiens cDNA clone IMAGE:627282 5'
6690	19607	32647	0.94	0.0E+00	U39573.1	NT	Human salivary peroxidase mRNA, complete cds
6693	19610	32649	0.91	0.0E+00	BE571987.1	EST_HUMAN	7a49607.x1 NCI_CGAP_GC8 Homo sapiens cDNA clone IMAGE:3222037 3' similar to TR:Q9Z285 Q9Z285 TEKTIN.1
6703	19618	32660	6.69	0.0E+00	A1940621.1	EST_HUMAN	IL3-ST0024-230789-001-B01 ST0024 Homo sapiens cDNA
6703	19618	32661	6.69	0.0E+00	A1940621.1	EST_HUMAN	IL3-ST0024-230789-001-B01 ST0024 Homo sapiens cDNA
6714	19629	32674	1.91	0.0E+00	11435628	NT	Homo sapiens CD8 antigen (CD8), mRNA
6726	19660	32592	0.99	0.0E+00	AL042443.1	EST_HUMAN	DKFZp434D2021.f1 434 (synonym: hnc3) Homo sapiens cDNA clone DKFZp434D2021 5'
6729	19663	32595	0.9	0.0E+00	AI108270.1	EST_HUMAN	cc10d01.x1 Soares_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:1565761 3' similar to TR:Q26623 Q26623 TEKTIN G1.1
6734	19668	32600	0.83	0.0E+00	BE734087.1	EST_HUMAN	601567370F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3842080 5'
6752	17921	30666	1.88	0.0E+00	BE566381.1	EST_HUMAN	601339877F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3682267 5'
6761	17930	30565	11.84	0.0E+00	BE867889.1	EST_HUMAN	601443967F1 NIH_MGC_95 Homo sapiens cDNA clone IMAGE:3847697 5'
6761	17930	30566	11.84	0.0E+00	BE867889.1	EST_HUMAN	601443967F1 NIH_MGC_95 Homo sapiens cDNA clone IMAGE:3847697 5'
6766	19510	32535	2.2	0.0E+00	BE550162.1	EST_HUMAN	7b46003.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3231581 3' similar to SW:GG95_HUMAN Q08379 GOLGIN-95.1
6766	19510	32536	2.2	0.0E+00	BE550162.1	EST_HUMAN	7b46003.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3231581 3' similar to SW:GG95_HUMAN Q08379 GOLGIN-95.1
6790	19534	32562	1.25	0.0E+00	BF086376.1	EST_HUMAN	CM1-HT0877-060900-397-g11 HT0877 Homo sapiens cDNA
6796	19540	32568	2.48	0.0E+00	AA195106.1	EST_HUMAN	zz34g03.f1 Soares_NH-IMPu_S1 Homo sapiens cDNA clone IMAGE:665332 5'
6803	19464		12.37	0.0E+00	11034810	NT	Homo sapiens catenin (cadherin-associated protein), delta 2 (neural plakophilin-related arm-repeat protein) (CTNND2), mRNA



Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6805	19468	32487	1.08	0.0E+00	11431474	NT	Homo sapiens sodium channel, nonvoltage-gated 1, beta (Liddle syndrome) (SCNN1B), mRNA
6807	19468	32490	0.6	0.0E+00	BE313075.1	EST_HUMAN	601150682F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3503391 5'
6807	19468	32491	0.6	0.0E+00	BE313075.1	EST_HUMAN	601150682F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3503391 5'
6822	19483	32505	2.69	0.0E+00	BF569905.1	EST_HUMAN	602185852F1 NIH_MGC_45 Homo sapiens cDNA clone IMAGE:4310078 5'
6837	19489		2.32	0.0E+00	J03089.1	NT	Human MYCL2 gene, complete cds
6845	19545	32573	3.52	0.0E+00	AF217289.1	NT	Homo sapiens cadherin 20 (CDH20) mRNA, complete cds
6845	19545	32574	3.52	0.0E+00	AF217289.1	NT	Homo sapiens cadherin 20 (CDH20) mRNA, complete cds
6846	19546	32575	1.18	0.0E+00	M38113.1	NT	Human neurofibromatosis type 1 gene, exon x6
6858	17935	30571	3.2	0.0E+00	11420776	NT	Homo sapiens melanoma antigen, family B, 2 (MAGEB2), mRNA
6859	17936	30572	0.74	0.0E+00	AI419996.1	EST_HUMAN	tg53c06.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2112490 3' similar to SW:OXYB_HUMAN P22059 OXYSTEROL-BINDING PROTEIN ;
6859	17936	30573	0.74	0.0E+00	AI419996.1	EST_HUMAN	tg53c06.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2112490 3' similar to SW:OXYB_HUMAN P22059 OXYSTEROL-BINDING PROTEIN ;
6863	17940	30576	0.78	0.0E+00	BE256708.1	EST_HUMAN	601115515F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3356330 5'
6874	17950	30546	0.58	0.0E+00	BE504955.1	EST_HUMAN	601496743F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3898739 5'
6884	17980	30514	1.05	0.0E+00	AU118478.1	EST_HUMAN	AU118478 HEMBA1 Homo sapiens cDNA clone HEMBA1003879 5'
6887	17983	30518	8.08	0.0E+00	BE262041.1	EST_HUMAN	601148954F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3501829 5'
6888	17984	30519	2.26	0.0E+00	Z37976.1	NT	H. sapiens mRNA for latent transforming growth factor-beta binding protein (LTBP-2)
6888	17984	30520	2.26	0.0E+00	Z37976.1	NT	H. sapiens mRNA for latent transforming growth factor-beta binding protein (LTBP-2)
6889	17985	30521	3.26	0.0E+00	AF257737.1	NT	Homo sapiens ciliary dynein heavy chain 9 (DNAH9) mRNA, complete cds
6889	17985	30522	3.26	0.0E+00	AF257737.1	NT	Homo sapiens ciliary dynein heavy chain 9 (DNAH9) mRNA, complete cds
6894	17970	30527	1.06	0.0E+00	AF310105.1	NT	Homo sapiens NALP1 mRNA, complete cds
6899	19637	32681	1.03	0.0E+00	BE762770.1	EST_HUMAN	QV3-NT0022-140600-223-101 NT0022 Homo sapiens cDNA
6904	19642	32687	2.37	0.0E+00	BF569906.1	EST_HUMAN	602185852F1 NIH_MGC_45 Homo sapiens cDNA clone IMAGE:4310078 5'
6908	19646	32682	4.53	0.0E+00	L01978.1	NT	Human type IV sodium channel alpha polypeptide (SCN4A) gene, exon 19
6913	19650	32686	0.79	0.0E+00	AW502362.1	EST_HUMAN	U1-HF-BR0p-aka-d-10-Q-U1.1 NIH_MGC_52 Homo sapiens cDNA clone IMAGE:3076290 5'
6913	19650	32687	0.79	0.0E+00	AW502362.1	EST_HUMAN	U1-HF-BR0p-aka-d-10-Q-U1.1 NIH_MGC_52 Homo sapiens cDNA clone IMAGE:3076290 5'
6922	19658	32704	0.7	0.0E+00	AL039581.1	EST_HUMAN	DKFZp434D2211.1_1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434D2211 5'
6922	19658	32705	0.7	0.0E+00	AL039581.1	EST_HUMAN	DKFZp434D2211.1_1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434D2211 5'
6929	19666	32711	5.87	0.0E+00	BF306908.1	EST_HUMAN	601889823F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4123948 5'
6934	19699	32715	2.33	0.0E+00	U41302.1	NT	Human chromosome 16 creatine transporter (SLC6A8) and (CDM) paralogous genes, complete cds
6972	19484	32474	1.18	0.0E+00	AL049784.1	NT	Novel human gene mapping to chromosome 13
7008	19700	32754	0.65	0.0E+00	AB029893.1	NT	Homo sapiens mRNA for vesicular cadherin-2, complete cds

Table 4  
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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7008	19700	32755	0.65	0.0E+00	AB026893.1	NT	Homo sapiens mRNA for vascular cadherin-2, complete cds
7013	19705	32761	1.07	0.0E+00	AU137738.1	EST_HUMAN	AU137738 PLACE1 Homo sapiens cDNA clone PLACE1007120 5'
7013	19705	32762	1.07	0.0E+00	AU137738.1	EST_HUMAN	AU137738 PLACE1 Homo sapiens cDNA clone PLACE1007120 5'
7019	19711	32768	1.2	0.0E+00	AW954806.1	EST_HUMAN	EST368878 MAGC resequences, MAGC Homo sapiens cDNA
7020	19712	32769	0.9	0.0E+00	BE254103.1	EST_HUMAN	501113558F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3354566 5'
7033	19725	32781	0.88	0.0E+00	L01973.1	NT	Human type VI sodium channel alpha polypeptide (SCN4A) gene, exon 14
7041	19732	32791	0.64	0.0E+00	AB007935.1	NT	Homo sapiens mRNA for KIAA0466 protein, partial cds
7041	19732	32792	0.64	0.0E+00	AB007935.1	NT	Homo sapiens mRNA for KIAA0466 protein, partial cds
7047	19738	32799	2.73	0.0E+00	AU133213.1	EST_HUMAN	AU133213 NT2RP4 Homo sapiens cDNA clone NT2RP4001558 5'
7062	19753	32818	0.95	0.0E+00	11428081	NT	Homo sapiens membrane protein CH1 (CH1), mRNA
7064	19755	32820	0.56	0.0E+00	AA312125.1	EST_HUMAN	EST182818 Jurkat T-cells VI Homo sapiens cDNA 5' end
7069	19780		2.57	0.0E+00	AU143708.1	EST_HUMAN	AU143708 Y79AA1 Homo sapiens cDNA clone Y79AA1002365 5'
7070	19781	32825	0.94	0.0E+00		NT	Homo sapiens nefrin 1 (NTN1), mRNA
7079	19770	32834	1.32	0.0E+00	BE891286.1	EST_HUMAN	601431819F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3917164 5'
7079	19770	32835	1.32	0.0E+00	BE891286.1	EST_HUMAN	601431819F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3917164 5'
7100	17881	30495	2.54	0.0E+00	AF137286.1	NT	Homo sapiens keratin 12 (KRT12) gene, complete cds
7100	17881	30496	2.54	0.0E+00	AF137286.1	NT	Homo sapiens keratin 12 (KRT12) gene, complete cds
7122	19810	32878	5.01	0.0E+00	11436699	NT	Homo sapiens vitamin D (1,25-dihydroxyvitamin D3) receptor (VDR), mRNA
7122	19810	32877	5.01	0.0E+00	11436699	NT	Homo sapiens vitamin D (1,25-dihydroxyvitamin D3) receptor (VDR), mRNA
7137	19824	32881	0.55	0.0E+00	AF227744.1	NT	Homo sapiens voltage-dependent calcium channel alpha 1G subunit isoform aa (CACNA1G) mRNA, complete cds
7158	19843	32911	37.67	0.0E+00	A128344.1	EST_HUMAN	qc37a07.x1 Soares_placenta_8tc6weeks_2NbhHP8tc6W Homo sapiens cDNA clone IMAGE:1714844 3' similar to SW:ARSD_HUMAN P51689 ARYL SULFATASE D PRECURSOR, contains element HGR repetitive element;
7158	19843	32912	37.67	0.0E+00	A128344.1	EST_HUMAN	qc37a07.x1 Soares_placenta_8tc6weeks_2NbhHP8tc6W Homo sapiens cDNA clone IMAGE:1714844 3' similar to SW:ARSD_HUMAN P51689 ARYL SULFATASE D PRECURSOR, contains element HGR repetitive element;
7158	19846	32914	0.66	0.0E+00	AF227135.1	NT	Homo sapiens candidate taste receptor T2R9 gene, complete cds
7158	19845	32915	0.66	0.0E+00	AF227135.1	NT	Homo sapiens candidate taste receptor T2R9 gene, complete cds
7161	19848	32918	4.65	0.0E+00	11426392	NT	Homo sapiens myosin, heavy polypeptide 8, skeletal muscle, perinatal (MYH8), mRNA
7161	19848	32919	4.65	0.0E+00	11426392	NT	Homo sapiens myosin, heavy polypeptide 8, skeletal muscle, perinatal (MYH8), mRNA
7163	19850		15.23	0.0E+00	BF337375.1	EST_HUMAN	602035089F1 NCI_CGAP_Brm84 Homo sapiens cDNA clone IMAGE:4182839 5'
7165	19852	32921	2.85	0.0E+00	AA128453.1	EST_HUMAN	zn60709.r1 Stratiogene muscle 937209 Homo sapiens cDNA clone IMAGE:562601 5' similar to TR:G806582 G806582 NEBULIN;

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7170	19856	32927	0.7	0.0E+00	AL079497.1	EST_HUMAN	DKFZp434B0228_1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434B0228 5'
7170	19856	32928	0.7	0.0E+00	AL079497.1	EST_HUMAN	DKFZp434B0228_1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434B0228 5'
7208	19893	32969	1.09	0.0E+00	BE286499.1	EST_HUMAN	601174578F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3529794 5'
7210	19895	32970	1	0.0E+00	11427985	NT	Homo sapiens hypothetical protein (FLJ20281), mRNA
7213	19898		1.42	0.0E+00	AU118907.1	EST_HUMAN	AU118907 HEMBA1 Homo sapiens cDNA clone HEMBA1003989 5'
7214	19898	32973	1.99	0.0E+00	AF005213.1	NT	Homo sapiens ankyrin 1 (ANK1) mRNA, complete cds
7214	19898	32974	1.99	0.0E+00	AF005213.1	NT	Homo sapiens ankyrin 1 (ANK1) mRNA, complete cds
7228	19911	32984	0.87	0.0E+00	AF245005.1	NT	Homo sapiens adican mRNA, complete cds
7232	19917	32989	8.04	0.0E+00	X70172.1	NT	H. sapiens DNA for ZNGP2 pseudogene, exon 4
7234	19919	32991	8.51	0.0E+00	U46448.1	NT	Human P2x1 receptor mRNA, complete cds
7234	19919	32992	8.51	0.0E+00	U46448.1	NT	Human P2x1 receptor mRNA, complete cds
7247	19932	33007	0.86	0.0E+00	AW066503.1	EST_HUMAN	EST388573 MAGC resequences, MAGD Homo sapiens cDNA
7249	19934	33009	0.58	0.0E+00	BE672445.1	EST_HUMAN	760h08.x1 NCI_CGAP_GC6 Homo sapiens cDNA clone IMAGE:3223167 3' similar to gb.M54911_mna1 IG
7250	19935	33010	2.52	0.0E+00	AW650516.1	EST_HUMAN	HEAVY CHAIN PRECURSOR V-J REGION (HUMAN);
7273	19957	33033	0.67	0.0E+00	AF001543.1	EST_HUMAN	EST362566 MAGC resequences, MAGA Homo sapiens cDNA
7273	19957	33034	0.57	0.0E+00	AF001543.1	EST_HUMAN	AF001543 Human cDNA (Chandrasekharappa,S.C.) Homo sapiens cDNA clone kappa_200
7273	19957	33035	0.57	0.0E+00	AF001543.1	EST_HUMAN	AF001543 Human cDNA (Chandrasekharappa,S.C.) Homo sapiens cDNA clone kappa_200
7282	19975		0.58	0.0E+00	MB0354.1	NT	Human BTF3 protein homolog gene, complete cds
7293	19978	33053	0.98	0.0E+00	BE408293.1	EST_HUMAN	601302679F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3637434 5'
7305	19988	33064	0.8	0.0E+00	AW402542.1	EST_HUMAN	UH-IF-BKO-ess-g-07-q-UJ1 NIH_MGC_36 Homo sapiens cDNA clone IMAGE:3054824 5'
7322	20005		1.43	0.0E+00	R87430.1	EST_HUMAN	ym88h10.r1 Soares adult brain N2b-4fB55Y Homo sapiens cDNA clone IMAGE:189051 5'
7323	20006	33083	1.88	0.0E+00	AW239326.1	EST_HUMAN	x639a05.y1 NCI_CGAP_Lu31 Homo sapiens cDNA clone IMAGE:2578640 5' similar to TR:Q08050 Q08050
7342	20023		1.31	0.0E+00	AU117553.1	EST_HUMAN	HNFB3/FH TRANSCRIPTION FACTOR GENESIS ;
7344	20025	33101	3.87	0.0E+00	11427195	NT	AU117553 HEMBA1 Homo sapiens cDNA clone HEMBA1001661 5'
7366	20046	33125	0.58	0.0E+00	BF229235.1	EST_HUMAN	Homo sapiens glucagon-like peptide 2 receptor (GLP2R), mRNA
7372	20052	33133	0.87	0.0E+00	L32832.1	NT	MR0-AN0083-270900-004-07 AN0083 Homo sapiens cDNA
7397	20075	33154	1.18	0.0E+00	BF306960.1	EST_HUMAN	Homo sapiens zinc finger homeodomain protein (ATBF1-A) mRNA, complete cds
7397	20075	33155	1.18	0.0E+00	BF306960.1	EST_HUMAN	601889823F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4123948 5'
7406	20083	33166	0.92	0.0E+00	AU118767.1	EST_HUMAN	601889823F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4123948 5'
7460	20133	33223	4.16	0.0E+00	AT752861.1	EST_HUMAN	AU118767 HEMBA1 Homo sapiens cDNA clone HEMBA1004314 5'
							cn17d05.x1 Normal Human Trabecular Bone Cells Homo sapiens cDNA clone NHTBC_cn17d05 random

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7460	20133	33224	4.18	0.0E+00	AJ752561.1	EST_HUMAN	cn17d05.x1 Normal Human Trabecular Bone Cells Homo sapiens cDNA clone NHTBC_cn17d05 random
7535	20205	33301	1.83	0.0E+00	AF064205.1	NT	Homo sapiens dynactin 1 (DCTN1) gene, alternatively spliced products, exons 7 through 32 and complete cds
7535	20205	33302	1.83	0.0E+00	AF064205.1	NT	Homo sapiens dynactin 1 (DCTN1) gene, alternatively spliced products, exons 7 through 32 and complete cds
7543	20213	33313	1.14	0.0E+00	U74315.1	EST_HUMAN	HSU74315 Human chromosome 14 Homo sapiens cDNA clone 1-4
7557	20227	33330	1.1	0.0E+00	11417342	NT	Homo sapiens sema domain, seven thrombospondin repeats (type 1 and type 1-like), transmembrane domain (TM) and short cytoplasmic domain, (semaforin) 5A (SEMA5A), mRNA
7570	20239	33343	2.28	0.0E+00	AW672785.1	EST_HUMAN	ba01e06.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823106 5' similar to SW:P101_PIG O02608 PHOSPHATIDYLINOSITOL 3-KINASE REGULATORY SUBUNIT;
7570	20239	33344	2.28	0.0E+00	AW672785.1	EST_HUMAN	ba01e06.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823106 5' similar to SW:P101_PIG O02608 PHOSPHATIDYLINOSITOL 3-KINASE REGULATORY SUBUNIT;
7586	20264	33380	1.97	0.0E+00	AJ825504.1	EST_HUMAN	wb17g05.x1 NCI_CGAP_GC8 Homo sapiens cDNA clone IMAGE:2305976 3' similar to TR:O75363 O75363 AIBC1.;
7586	20254	33361	1.97	0.0E+00	AJ825504.1	EST_HUMAN	wb17g05.x1 NCI_CGAP_GC8 Homo sapiens cDNA clone IMAGE:2305976 3' similar to TR:O75363 O75363 AIBC1.;
7594	20262	33370	1.51	0.0E+00	6912735	NT	Homo sapiens transient receptor potential channel 5 (TRPC5), mRNA
7599	20265	33373	1.09	0.0E+00	N76128.1	EST_HUMAN	za68e05.s1 Soares_fetal_king_NbHL19W Homo sapiens cDNA clone IMAGE:298458 3'
7604	20270	33377	5.87	0.0E+00	BF217905.1	EST_HUMAN	601885465F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:4103729 5'
7613	20279	33387	5.41	0.0E+00	AU129622.1	EST_HUMAN	AU129622 NT2RP2 Homo sapiens cDNA clone NT2RP2005913 5'
7633	25117	33406	0.97	0.0E+00	AW069274.1	EST_HUMAN	cr42e09.x1 Jia bone marrow stroma Homo sapiens cDNA clone HBMSC_cr42e09 3'
7633	25117	33407	0.97	0.0E+00	AW069274.1	EST_HUMAN	cr42e09.x1 Jia bone marrow stroma Homo sapiens cDNA clone HBMSC_cr42e09 3'
7636	20301	33409	6.26	0.0E+00	4501848	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 3 (ABCA3), mRNA
7643	20308	33416	1.13	0.0E+00	AV758467.1	EST_HUMAN	AV758467 BM Homo sapiens cDNA clone BMFBG305 5'
7645	20309	33417	6.31	0.0E+00	BE739870.1	EST_HUMAN	601593156F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3947365 5'
7645	20309	33418	6.31	0.0E+00	BE739870.1	EST_HUMAN	601593156F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3947365 5'
7646	20310	33419	1.18	0.0E+00	6912461	NT	Homo sapiens atrophin-1 interacting protein 1; activin receptor interacting protein 1 (KIAA0705), mRNA
7646	20310	33420	1.18	0.0E+00	6912461	NT	Homo sapiens atrophin-1 interacting protein 1; activin receptor interacting protein 1 (KIAA0705), mRNA
7647	20311	33421	0.71	0.0E+00	AU120424.1	EST_HUMAN	AU120424 HEMBB1 Homo sapiens cDNA clone HEMBB1000655 5'
7647	20311	33422	0.71	0.0E+00	AU120424.1	EST_HUMAN	AU120424 HEMBB1 Homo sapiens cDNA clone HEMBB1000655 5'
7680	20344	33456	1.81	0.0E+00	BE767810.1	EST_HUMAN	601481713F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3884258 5'



Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8035	20730		1.32	0.0E+00	BE877693.1	EST_HUMAN	601485254F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3887773 5'
8057	20761	33882	2.48	0.0E+00	AW500549.1	EST_HUMAN	U1HF-BN0-alk-01-0-U1r1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3077490 5'
8065	20759	33888	16.05	0.0E+00	AW157233.1	EST_HUMAN	au63b08.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2783799 3' similar to TR:060463 060463 TYPE-2 PHOSPHATIDIC ACID PHOSPHOHYDROLASE [1];
8082	20779	33906	0.68	0.0E+00	AW072395.1	EST_HUMAN	xa07d12.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2567639 3' similar to contains element OFR repetitive element;
8099	20793	33924	1.09	0.0E+00	11421722	NT	Homo sapiens centrosomal protein 2 (CEP2), mRNA
8102	20796	33927	1.07	0.0E+00	W01616.1	EST_HUMAN	za36d05.r1 Soares fetal liver spleen TNF1S Homo sapiens cDNA clone IMAGE:294633 5'
8104	20798	33929	1.22	0.0E+00	BE745597.1	EST_HUMAN	601578195F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3926998 5'
8104	20798	33930	1.22	0.0E+00	BE745597.1	EST_HUMAN	601578195F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3926998 5'
8115	20809	33943	1.46	0.0E+00	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
8154	20848	33980	0.95	0.0E+00	A1987350.1	EST_HUMAN	qv05c12.x1 NCI_CGAP_U12 Homo sapiens cDNA clone IMAGE:1989334 3' similar to TR:Q14673 Q14673 K1AA0164 PROTEIN.;
8166	20869	33991	2.63	0.0E+00	BE674157.1	EST_HUMAN	7d76a04.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3278662 3' similar to TR:O95793 O95793 STAUFEN PROTEIN.;
8167	20861	33993	1.19	0.0E+00	A1895671.1	EST_HUMAN	w60b10.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2429275 3' similar to SW:COGT_HUMAN P50281 MATRIX METALLOPROTEINASE-14 PRECURSOR.;
8180	20874	34009	1.07	0.0E+00	BE563650.1	EST_HUMAN	601334790F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3888655 5'
8180	20874	34010	1.07	0.0E+00	BE563650.1	EST_HUMAN	601334790F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3888655 5'
8189	20883	34020	1.63	0.0E+00	11427235	NT	Homo sapiens Chediak-Higashi syndrome 1 (CHS1), mRNA
8189	20883	34021	1.63	0.0E+00	11427235	NT	Homo sapiens Chediak-Higashi syndrome 1 (CHS1), mRNA
8191	20885	34023	3.2	0.0E+00	AA403192.1	EST_HUMAN	zv66102.r1 Soares_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:758619 5' similar to TR:G1304132 G1304132 TPRD.;
8191	20885	34024	3.2	0.0E+00	AA403192.1	EST_HUMAN	zv66102.r1 Soares_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:758619 5' similar to TR:G1304132 G1304132 TPRD.;
8231	20925		4.63	0.0E+00	AA398511.1	EST_HUMAN	z73a08.a1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:727958 3' similar to gb:S85855 PROHIBITIN (HUMAN);
8240	20924	34071	0.55	0.0E+00	BE837693.1	EST_HUMAN	RC2-FN0094-120600-013-07 FN0094 Homo sapiens cDNA
8241	20935	34072	1.17	0.0E+00	AW364874.1	EST_HUMAN	QV3-DT0045-221299-048-c07 DT0045 Homo sapiens cDNA
8241	20935	34073	1.17	0.0E+00	AW364874.1	EST_HUMAN	QV3-DT0045-221299-048-c07 DT0045 Homo sapiens cDNA
8260	20954	34092	1.88	0.0E+00	BE612586.1	EST_HUMAN	601452412F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3856179 5'
8260	20954	34093	1.88	0.0E+00	BE612586.1	EST_HUMAN	601452412F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3856179 5'
8275	20969	34110	1.52	0.0E+00	AL163208.2	NT	Homo sapiens chromosome 21 segment HS21C009
8275	20969	34111	1.52	0.0E+00	AL163208.2	NT	Homo sapiens chromosome 21 segment HS21C009

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST-E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8288	20980	34120	1.3	0.0E+00	A1884477.1	EST_HUMAN	wn33at1.x1 NCI_CGAP_Uk4 Homo sapiens cDNA clone IMAGE:2437724 3' similar to TR:075457 075457 CYTOSOLIC PHOSPHOLIPASE A2-GAMMA. ;
8293	20987	34128	1.27	0.0E+00	AA502294.1	EST_HUMAN	ne25d10.a1 NCI_CGAP_Co3 Homo sapiens cDNA clone IMAGE:882259 3' similar to TR:G1136434 G1136434 KIAA0187 PROTEIN. ;
8298	20992		0.59	0.0E+00	11416799	NT	Homo sapiens proboscoidin beta 3 (PCDH83), mRNA
8305	20999	34137	1.02	0.0E+00	A1580780.1	EST_HUMAN	hs04f11.x1 Sceres_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:2043117 3'
8308	21002		1.84	0.0E+00	BE590787.1	EST_HUMAN	601431238F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3916569 5'
8334	21027	34163	0.72	0.0E+00	AW245785.1	EST_HUMAN	2822701.5 Sprime NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2822701 5'
8334	21027	34164	0.72	0.0E+00	AW245785.1	EST_HUMAN	2822701.5 Sprime NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2822701 5'
8335	21028	34165	2.24	0.0E+00	4758695	NT	Homo sapiens mitogen-activated protein kinase kinase 13 (MAP3K13), mRNA
8335	21028	34166	2.24	0.0E+00	4758695	NT	Homo sapiens mitogen-activated protein kinase kinase 13 (MAP3K13), mRNA
8339	21032	34169	0.59	0.0E+00	U88084.1	NT	Human zinc finger protein (ZNF165), gene, exons 2 and 3
8339	21032	34170	0.59	0.0E+00	U88084.1	NT	Human zinc finger protein (ZNF165), gene, exons 2 and 3
8404	21097	34233	0.66	0.0E+00	AJ251760.1	NT	Homo sapiens NESP55, GNA31 antisense (partial) and Xlaiphas (partial) genes
8409	21102	34239	2.63	0.0E+00	X98922.1	NT	H. sapiens mRNA for gamma-glutamyltransferase
8409	21102	34240	2.63	0.0E+00	X98922.1	NT	H. sapiens mRNA for gamma-glutamyltransferase
8409	21102	34241	2.63	0.0E+00	X98922.1	NT	H. sapiens mRNA for gamma-glutamyltransferase
8424	21117	34255	0.68	0.0E+00	U82979.1	NT	Human immunoglobulin-like transcript-3 mRNA, complete cds
8465	21157	34300	0.88	0.0E+00	AF022855.1	NT	Homo sapiens cep250 centrosome associated protein mRNA, complete cds
8465	21157	34301	0.88	0.0E+00	AF022855.1	NT	Homo sapiens cep250 centrosome associated protein mRNA, complete cds
8468	21160	34303	2.28	0.0E+00	AU131671.1	EST_HUMAN	AU131671 NT2RP3 Homo sapiens cDNA clone NT2RP303016 5'
8483	21175	34320	0.65	0.0E+00	11426572	NT	Homo sapiens immunoglobulin superfamily, member 2 (IGSF2), mRNA
8487	21179		1.92	0.0E+00	AW513513.1	EST_HUMAN	xp46e01.x1 NCI_CGAP_UH1 Homo sapiens cDNA clone IMAGE:2707032 3' similar to db:M14123_cds4 RETROVIRUS-RELATED POL POLYPROTEIN (HUMAN);
8489	21181	34323	14.65	0.0E+00	D52650.1	EST_HUMAN	HUM084C02B Clontech human fetal brain polyA+ mRNA (#8535) Homo sapiens cDNA clone GEN-084C02 5'
8520	21212	34356	4.04	0.0E+00	BE378495.1	EST_HUMAN	601236488F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3008709 5'
8528	21218	34360	2.58	0.0E+00	AA410545.1	EST_HUMAN	z32a04.t1 Sceres ovary tumor NbHOT Homo sapiens cDNA clone IMAGE:724062 5'
8528	21220		2.91	0.0E+00	BF313946.1	EST_HUMAN	601800571F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4128744 5'
8535	21227	34369	0.52	0.0E+00	11424387	NT	Homo sapiens leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 3 (LILRB3), mRNA
8540	21232	34374	1.46	0.0E+00	AW139873.1	EST_HUMAN	UI-H-B11-edt-e-12-Q-UJ.s1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2717687 3'
8540	21232	34375	1.46	0.0E+00	AW139873.1	EST_HUMAN	UI-H-B11-edt-e-12-Q-UJ.s1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2717687 3'

Table 4  
Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8545	21237		0.49	0.0E+00	AI640190.1	EST_HUMAN	w830b10.x1 NCL_CGAP_Kd11 Homo sapiens cDNA clone IMAGE:2289578 3' similar to TR:O15044
8564	21256	34393	0.76	0.0E+00	BF377897.1	EST_HUMAN	O15044 KIAA0335.1
8574	21266	34406	0.59	0.0E+00	AL163301.2	NT	CM1-TN0141-260900-439-b08 TN0141 Homo sapiens cDNA
8580	21272	34410	5.80	0.0E+00	BE260272.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21G101
8585	21277	34414	2.51	0.0E+00	BF700165.1	EST_HUMAN	601150051F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3502836 5'
8585	21277	34415	2.51	0.0E+00	BF700165.1	EST_HUMAN	602127664F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:4284542 5'
8585	21277	34416	2.51	0.0E+00	BF700165.1	EST_HUMAN	602127664F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:4284542 5'
8600	21292	34434	0.53	0.0E+00	AI459722.1	EST_HUMAN	ik13h11.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:2150949 3'
8626	21318	34460	0.86	0.0E+00	AL449770.1	EST_HUMAN	AL449770 Homo sapiens fetal brain (Stanley GS) Homo sapiens cDNA
8631	21323	34464	7.75	0.0E+00	AA962527.1	EST_HUMAN	cr80g02.x1 NCL_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1602164 3' similar to gb:M36072.60S
8637	21329	34472	3.09	0.0E+00	10947037	NT	RIBOSOMAL PROTEIN L7A (HUMAN);
8637	21329	34473	3.09	0.0E+00	10947037	NT	Homo sapiens ankyrin 1, erythrocytic (ANK1), transcript variant 1, mRNA
8690	21352	34469	1.3	0.0E+00	Y11107.3	NT	Homo sapiens ankyrin 1, erythrocytic (ANK1), transcript variant 1, mRNA
8692	21354	34501	1.92	0.0E+00	BE278917.1	EST_HUMAN	Homo sapiens ITGB4 gene for Integrin beta 4 subunit, exons 3-41
8672	21364		1.91	0.0E+00	AV718377.1	EST_HUMAN	601158330F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3139734 5'
8679	21371	34616	3.33	0.0E+00	AW337277.1	EST_HUMAN	AV718377 FHTB Homo sapiens cDNA clone FHTBAAF11 5'
8685	21377	34621	1.12	0.0E+00	AU124051.1	EST_HUMAN	3w73c07.x1 NCL_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2833644 3' similar to gb:X53587
8761	21453	34601	1.05	0.0E+00	AU140704.1	EST_HUMAN	INTEGRIN BETA-4 SUBUNIT PRECURSOR (HUMAN);
8771	21463	34610	0.86	0.0E+00	AB007923.1	NT	AU124051 NT2RM2 Homo sapiens cDNA clone NT2RM2001575 5'
8776	21468	34614	0.54	0.0E+00	R17132.1	EST_HUMAN	AU140704 PLAGE4 Homo sapiens cDNA clone PLAGE400088 5'
8776	21468	34615	0.54	0.0E+00	R17132.1	EST_HUMAN	Homo sapiens mRNA for KIAA0454 protein, partial cds
8780	21472	34617	4.43	0.0E+00	AW592233.1	EST_HUMAN	y089e09.r1 Soares Infant brain 1NIB Homo sapiens cDNA clone IMAGE:31674 5'
8780	21472	34618	4.43	0.0E+00	AW592233.1	EST_HUMAN	y089e09.r1 Soares Infant brain 1NIB Homo sapiens cDNA clone IMAGE:31674 5'
8815	21507	34652	0.47	0.0E+00	AU128804.1	EST_HUMAN	hf48a09.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2935098 3'
8827	21519	34664	1.04	0.0E+00	AV714784.1	EST_HUMAN	hf48a09.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2935098 3'
8843	21535	34679	2.79	0.0E+00	AL040428.1	EST_HUMAN	AU128804 NT2RP2 Homo sapiens cDNA clone NT2RP2004245 5'
8843	21535	34680	2.79	0.0E+00	AL040428.1	EST_HUMAN	AV714784 DCB Homo sapiens cDNA clone DCBAUA08 5'
8849	21540	34686	1.17	0.0E+00	AF133901.1	NT	DKFZp434C1814_s1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434C1814 3'
8851	21542	34689	2.03	0.0E+00	AB040945.1	NT	DKFZp434C1814_s1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434C1814 3'
8858	21549	34696	0.65	0.0E+00	BF675505.1	EST_HUMAN	DKFZp434C1814_s1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434C1814 3'
							Homo sapiens killer inhibitory receptor 2-2-1 (KIR221) and killer inhibitory receptor 2-2-2 (KIR222) genes, partial cds
							partial cds
							Homo sapiens mRNA for KIAA1512 protein, partial cds
							602138483F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4274708 5'



Table 4

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8880	21551		0.8	0.0E+00	BF058289.1	EST_HUMAN	7k28603.x1 NCI_CGAP_Ov18 Homo sapiens cDNA clone IMAGE:3476892 3' similar to TR:O38448 O38448
8889	21580	34720	3.97	0.0E+00	11422867	NT	S GAG. ;
8898	21589	34728	1.19	0.0E+00	K01241.1	NT	Homo sapiens tumor protein p73 (TP73), mRNA
8905	21598	34737	4.27	0.0E+00	AB020630.1	NT	Human Ig rearranged H-chain epsilon-3 pseudogene, constant region
8905	21598	34738	4.27	0.0E+00	AB020630.1	NT	Homo sapiens mRNA for KIAA0823 protein, partial cds
8910	21601	34744	1.79	0.0E+00	AV660739.1	EST_HUMAN	Homo sapiens mRNA for KIAA0823 protein, partial cds
8916	21607	34750	2.88	0.0E+00	7708638	NT	AV660739 GLC Homo sapiens cDNA clone GLCGK123'
8921	21612	34755	0.5	0.0E+00	BE793328.1	EST_HUMAN	Homo sapiens polycystin-1 (PKDL), mRNA
8922	21613	34756	0.73	0.0E+00	AB033077.1	NT	601588304F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3942553 5'
8922	21613	34757	0.73	0.0E+00	AB033077.1	NT	Homo sapiens mRNA for KIAA1251 protein, partial cds
8934	21626		0.91	0.0E+00	H73937.1	EST_HUMAN	Homo sapiens mRNA for KIAA1251 protein, partial cds
8944	21635	34779	4.57	0.0E+00	BE315402.1	EST_HUMAN	yu03h08.r1 Scores fetal liver spleen 1N1FLS Homo sapiens cDNA clone IMAGE:232787 5'
8944	21635	34780	4.57	0.0E+00	BE315402.1	EST_HUMAN	601141119F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3140740 5'
8954	21645	34796	0.46	0.0E+00	BE612721.1	EST_HUMAN	601141119F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3140740 5'
8954	21645	34796	0.46	0.0E+00	BE612721.1	EST_HUMAN	601452382F1 NIH_MGC_86 Homo sapiens cDNA clone IMAGE:3856100 5'
8957	21648		0.45	0.0E+00	M89986.1	NT	601452382F1 NIH_MGC_86 Homo sapiens cDNA clone IMAGE:3856100 5'
8959	21650	34800	3.66	0.0E+00	X14786.1	NT	Human polymorphic loci in Xq28
8960	21670	34820	2.03	0.0E+00	A1061395.1	EST_HUMAN	Human mRNA for GABA-A receptor, alpha 1 subunit
8985	21675	34824	1.95	0.0E+00	A1054907.1	EST_HUMAN	en28e04.x1 Geesler Wilms tumor Homo sapiens cDNA clone IMAGE:1700094 3'
8988	21679	34828	4.66	0.0E+00	9256596	NT	w034e12.x1 NCI_CGAP_G08 Homo sapiens cDNA clone IMAGE:2473150 3' similar to SW:MG83_HUMAN
9000	21690	34840	1.42	0.0E+00	AW986311.1	EST_HUMAN	O15480 MELANOMA-ASSOCIATED ANTIGEN B3 ;
9011	21701	34851	2.48	0.0E+00	9635487	NT	Homo sapiens protocadherin alpha 8 (PCDH8), mRNA
9026	21716	34869	1.63	0.0E+00	AU142962.1	EST_HUMAN	EST370381 MAGE resequences, MAGE Homo sapiens cDNA
9042	21732	34887	1.78	0.0E+00	11436965	NT	Human endogenous retrovirus, complete genome
9043	21733		1.18	0.0E+00	BE410768.1	EST_HUMAN	AU142962 Y79AA1 Homo sapiens cDNA clone Y79AA1000678 5'
9058	21745	34904	1.83	0.0E+00	BF002024.1	EST_HUMAN	Homo sapiens MAP-kinase activating death domain (MADD), mRNA
9070	21759	34920	1.1	0.0E+00	AB011150.1	NT	601301676F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3636163 5'
9071	21760	34921	7.72	0.0E+00	BE794823.1	EST_HUMAN	7g97h12.x1 NCI_CGAP_Cot16 Homo sapiens cDNA clone IMAGE:3314471 3' similar to TR:Q8LH62
9075	21764	34926	0.88	0.0E+00	BE810282.1	EST_HUMAN	Q8LH62 HYPOTHETICAL 42.6 KD PROTEIN ;
9075	21764	34927	0.89	0.0E+00	BE810282.1	EST_HUMAN	Homo sapiens mRNA for KIAA0578 protein, partial cds
9078	21767	34930	2.83	0.0E+00	AU136229.1	EST_HUMAN	601589294F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3943463 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9083	21772	34935	1.27	0.0E+00	BE883943.1	EST_HUMAN	601510247F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3911988 5'
9083	21772	34936	1.27	0.0E+00	BE883943.1	EST_HUMAN	601510247F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3911988 5'
9102	21790	34953	0.62	0.0E+00	AB011168.1	NT	Homo sapiens mRNA for KIAA0594 protein, partial cds
9108	21794	34957	1.4	0.0E+00	AA344801.1	EST_HUMAN	EST50505 Gall bladder   Homo sapiens cDNA 5' end
9108	21794	34958	1.4	0.0E+00	AA344801.1	EST_HUMAN	EST50505 Gall bladder   Homo sapiens cDNA 5' end
9164	21834	34998	1.13	0.0E+00	AW673499.1	EST_HUMAN	ba54d08.y3 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2900367 5' similar to TR:O60275 O60275
9164	21834	34999	1.13	0.0E+00	AW673499.1	EST_HUMAN	ba54d08.y3 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2900367 5' similar to TR:O60275 O60275
9198	21857	35031	1.62	0.0E+00	BE207063.1	EST_HUMAN	ba09005.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823873 5' similar to gb:L35049 Mus musculus Bcl-xL mRNA, complete cds (MOUSE);
9198	21857	35032	1.62	0.0E+00	BE207063.1	EST_HUMAN	ba09005.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823873 5' similar to gb:L35049 Mus musculus Bcl-xL mRNA, complete cds (MOUSE);
9209	22098	35260	1.61	0.0E+00	BF349013.1	EST_HUMAN	602023150F1 NC1 CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4158300 5'
9244	21923	35063	2.77	0.0E+00	BE712515.1	EST_HUMAN	QV2-HT0698-250700-282-508 HT0698 Homo sapiens cDNA
9277	22031	35201	0.88	0.0E+00	BF034377.1	EST_HUMAN	601455116F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3859035 5'
9277	22031	35202	0.88	0.0E+00	BF034377.1	EST_HUMAN	601455116F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3859035 5'
9283	22037	35209	0.5	0.0E+00	A1806351.1	EST_HUMAN	RC-BT108-040398-032 BT108 Homo sapiens cDNA
9286	22040	35211	0.81	0.0E+00	5803069	NT	Homo sapiens leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 5 (LLRB5), mRNA
9286	22040	35212	0.81	0.0E+00	5803069	NT	Homo sapiens leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 5 (LLRB5), mRNA
9290	21963	35137	1.5	0.0E+00	AL042278.1	EST_HUMAN	DKFZp434L0120_r1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434L0120 5'
9331	21998	35171	1.28	0.0E+00	A1089043.1	EST_HUMAN	ow60h01.x1 Soares_NSF_F8_gw_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:1661249 3' similar to TR:Q14677 Q14677 KIAA0171 PROTEIN ;
9338	20409	33524	0.72	0.0E+00	BF309982.1	EST_HUMAN	TR:1802245F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4138068 5'
9340	20411	33527	2.51	0.0E+00	11680151	NT	Homo sapiens hypothetical C2H2 zinc finger protein FLJ22504 (FLJ22504), mRNA
9340	20411	33528	2.51	0.0E+00	11680151	NT	Homo sapiens hypothetical C2H2 zinc finger protein FLJ22504 (FLJ22504), mRNA
9342	20413	33531	9.88	0.0E+00	A1290909.1	EST_HUMAN	qm09a03.x1 NC1 CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1881298 3' similar to SW:RL2B_HUMAN P29316 60S RIBOSOMAL PROTEIN L23A ;
9342	20413	33532	9.88	0.0E+00	A1290909.1	EST_HUMAN	qm09a03.x1 NC1 CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1881298 3' similar to SW:RL2B_HUMAN P29316 60S RIBOSOMAL PROTEIN L23A ;
9343	20414	33533	1.99	0.0E+00	AW938386.1	EST_HUMAN	EST368028 MAGC resequences, MAGC Homo sapiens cDNA
9370	21945	35117	3.07	0.0E+00	AF153468.1	NT	Homo sapiens polycystic kidney disease 2-like protein (PKD2L) gene, exon 8

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9373	21948	35121	0.66	0.0E+00	BE885128.1	EST_HUMAN	601510882F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3912165 5'
9373	21948	35122	0.66	0.0E+00	BE885128.1	EST_HUMAN	601510882F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3912165 5'
9382	22044		7.32	0.0E+00	BE255820.1	EST_HUMAN	601108942F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3350722 5'
9385	22047	35219	1.09	0.0E+00	BE781392.1	EST_HUMAN	601466828F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3870007 5'
9385	22047	35220	1.09	0.0E+00	BE781392.1	EST_HUMAN	601466828F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3870007 5'
9387	22049	35221	12.62	0.0E+00	AW163779.1	EST_HUMAN	601510882F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3912165 5'
9409	22071	35243	2.98	0.0E+00	BE263191.1	EST_HUMAN	601145054F2 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3180477 5'
9427	22105	35278	4.29	0.0E+00	C06158.1	EST_HUMAN	C06158 Human pancreatic islet Homo sapiens cDNA clone hbc5605
9427	22105	35279	4.29	0.0E+00	C06158.1	EST_HUMAN	C06158 Human pancreatic islet Homo sapiens cDNA clone hbc5605
9429	22107	35282	2.63	0.0E+00	BE746215.1	EST_HUMAN	601578683F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3927548 5'
9439	22117	35292	2.14	0.0E+00		NT	Homo sapiens solute carrier family 21 (organic anion transporter), member 9 (SLC21A9), mRNA
9439	22117	35293	2.14	0.0E+00	11437282	NT	Homo sapiens solute carrier family 21 (organic anion transporter), member 9 (SLC21A9), mRNA
9439	22117	35294	2.14	0.0E+00	11437282	NT	Homo sapiens solute carrier family 21 (organic anion transporter), member 9 (SLC21A9), mRNA
9459	22009	35179	1.44	0.0E+00	BE800549.1	EST_HUMAN	601873425F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3956238 5'
9475	22128	35307	1.01	0.0E+00	AV701829.1	EST_HUMAN	AV701829 ADB Homo sapiens cDNA clone ADBBYH01 5'
9489	22142	35321	2.62	0.0E+00	AF019084.1	NT	Homo sapiens keratin 2a (KRT2E) gene, complete cds
9489	22142	35322	2.62	0.0E+00	AF019084.1	NT	Homo sapiens keratin 2a (KRT2E) gene, complete cds
9522	22176	35359	0.94	0.0E+00	BE082977.1	EST_HUMAN	RC2-BT0842-190300-017-g01 BT0842 Homo sapiens cDNA
9541	22194	35379	1.74	0.0E+00	AW500293.1	EST_HUMAN	UIHF-BN0-alk-b-12-0-UJ.1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3076943 5'
9541	22194	35380	1.74	0.0E+00	AW500293.1	EST_HUMAN	UIHF-BN0-alk-b-12-0-UJ.1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3076943 5'
9550	22203	35388	1.45	0.0E+00	AF029308.1	NT	Homo sapiens chromosome 9 duplication of the T cell receptor beta locus and tyrosinogen gene families
9550	22203	35387	1.45	0.0E+00	AF029308.1	NT	Homo sapiens chromosome 9 duplication of the T cell receptor beta locus and tyrosinogen gene families
9552	22205	35388	0.69	0.0E+00	BE783272.1	EST_HUMAN	601470824F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3874037 5'
9552	22205	35389	0.69	0.0E+00	BE783272.1	EST_HUMAN	601470824F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3874037 5'
9561	22214	35400	0.54	0.0E+00	W56629.1	EST_HUMAN	zdf16e11.1 Soares_fetal_heart_NbHH19W Homo sapiens cDNA clone IMAGE:340844 5'
9561	22214	35401	0.54	0.0E+00	W56629.1	EST_HUMAN	zdf16e11.1 Soares_fetal_heart_NbHH19W Homo sapiens cDNA clone IMAGE:340844 5'
9572	22225	35410	1.83	0.0E+00	AB039356.1	NT	Homo sapiens mRNA for neuroxin I-alpha protein, complete cds
9576	22229		0.8	0.0E+00	A124780.1	EST_HUMAN	am50a11.1 Johnston frontal cortex Homo sapiens cDNA clone IMAGE:1539548 3'
9578	22231	35415	3.59	0.0E+00	AW500528.1	EST_HUMAN	UIHF-BN0-alk-c-07-0-UJ.1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3077384 5'
9624	22277	35468	1.53	0.0E+00	AF009668.1	NT	Multiple sclerosis associated retrovirus polyprotein (pot) mRNA, partial cds

# Single Exon Probes Expressed in Brain

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9652	22304	35499	2.23	0.0E+00	S78486.1	NT	AIIGF=androgen-induced growth factor AIIGF [human, placenta, Genomic/mRNA, 498 nt, segment 5 of 5]
9652	22304	35500	2.23	0.0E+00	S78486.1	NT	AIIGF=androgen-induced growth factor AIIGF [human, placenta, Genomic/mRNA, 498 nt, segment 5 of 5]
9655	22307	35505	2.93	0.0E+00	BE563320.1	EST_HUMAN	601334463F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:369090 5'
9674	22326	35521	1.64	0.0E+00	AW363135.1	EST_HUMAN	CM2-CT0311-307189-043-h11 CT0311 Homo sapiens cDNA
9692	22343	35537	0.46	0.0E+00	11436432	NT	Homo sapiens multidrug (MDR), mRNA
9693	22344	35538	0.51	0.0E+00	11424387	NT	Homo sapiens leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 3 (LILRB3), mRNA
9702	22353	35548	0.54	0.0E+00	BE206710.1	EST_HUMAN	bb28601.x1 NIH_MGC_5 Homo sapiens cDNA clone IMAGE:2984000 3'
9719	22370	35568	2.57	0.0E+00	AU132349.1	EST_HUMAN	AU132349 NT2RP3 Homo sapiens cDNA clone NT2RP3004260 5'
9719	22370	35569	2.57	0.0E+00	AU132349.1	EST_HUMAN	AU132349 NT2RP3 Homo sapiens cDNA clone NT2RP3004260 5'
9728	22379	35581	0.77	0.0E+00	AW500936.1	EST_HUMAN	UI-HF-BPop-air-7-08-0-JL1 NIH_MGC_51 Homo sapiens cDNA clone IMAGE:3072897 5'
9733	22384	35588	9.08	0.0E+00	BE740490.1	EST_HUMAN	601595558F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3848383 5'
9733	22384	35587	9.08	0.0E+00	BE740490.1	EST_HUMAN	601595558F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3848383 5'
9734	22385	35588	0.48	0.0E+00	AB033057.1	NT	Homo sapiens mRNA for KIAA1231 protein, partial cds
9734	22385	35589	0.48	0.0E+00	AB033057.1	NT	Homo sapiens mRNA for KIAA1231 protein, partial cds
9747	22398	35603	1.73	0.0E+00	7662067	NT	Homo sapiens KIAA0345 gene product (KIAA0345), mRNA
9765	22416	35623	1.99	0.0E+00	AL042278.1	EST_HUMAN	DKFZp434L0120_j1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434L0120 5'
9770	22421	35628	1.53	0.0E+00	AL041084.2	EST_HUMAN	DKFZp434B2416_j1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434B2416 5'
9780	22431	35636	2.54	0.0E+00	AU132349.1	EST_HUMAN	AU132349 NT2RP3 Homo sapiens cDNA clone NT2RP3004260 5'
9781	22432	35637	2.37	0.0E+00	AF152308.1	NT	Homo sapiens proteoglycan alpha 12 (PCDH-alpha12) mRNA, complete cds
9808	22450	35684	2.63	0.0E+00	AF092220.1	NT	Homo sapiens leukocyte immunoglobulin-like receptor-1 mRNA, complete cds
9808	22450	35685	2.63	0.0E+00	AF092220.1	NT	Homo sapiens leukocyte immunoglobulin-like receptor-1 mRNA, complete cds
9824	22475	35678	1.81	0.0E+00	BF092698.1	EST_HUMAN	MR4-TN0114-110900-101-e04 TN0114 Homo sapiens cDNA
9854	22504	35704	2.41	0.0E+00	BE280793.1	EST_HUMAN	601155227F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3138798 5'
9864	22514	35710	0.86	0.0E+00	BE388700.1	EST_HUMAN	601286351F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3613045 5'
9864	22514	35711	0.86	0.0E+00	BE388700.1	EST_HUMAN	601286351F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3613045 5'
9873	22523	35717	3.03	0.0E+00	AW236289.1	EST_HUMAN	xi72b01.x1 NCI CGAP_GML1 Homo sapiens cDNA clone IMAGE:2869977 3' similar to gb:X02152_cds1 L-
9874	22524	35718	1.06	0.0E+00	AA341305.1	EST_HUMAN	LACTATE DEHYDROGENASE M CHAIN (HUMAN);
9904	22553	35748	0.97	0.0E+00	AW994113.1	EST_HUMAN	EST46740 Fetal kidney II Homo sapiens cDNA 5' end
9915	22564	35759	7.01	0.0E+00	AU143673.1	EST_HUMAN	EST378186 MAGe resequences, MAGH Homo sapiens cDNA
9915	22564	35760	7.01	0.0E+00	AU143673.1	EST_HUMAN	AU143673 Y79AA1 Homo sapiens cDNA clone Y79AA1002307 5'
9915	22564	35760	7.01	0.0E+00	AU143673.1	EST_HUMAN	AU143673 Y79AA1 Homo sapiens cDNA clone Y79AA1002307 5'

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Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9918	22567	35763	2.98	0.0E+00	AF072408.1	NT	Homo sapiens killer cell inhibitory receptor KIR2C gene, exons 2, 3, and 4
9921	22568	35765	2.75	0.0E+00	11421001	NT	Homo sapiens HEF like Protein (HEFL), mRNA
9921	22569	35766	2.75	0.0E+00	11421001	NT	Homo sapiens HEF like Protein (HEFL), mRNA
9956	22604	35809	3	0.0E+00	AU136637.1	EST_HUMAN	AU136637 PLACE1 Homo sapiens cDNA clone PLACE1004737 5'
9956	22604	35810	3	0.0E+00	AU136637.1	EST_HUMAN	AU136637 PLACE1 Homo sapiens cDNA clone PLACE1004737 5'
9972	22620	35824	2.08	0.0E+00	AJ295844.1	NT	Homo sapiens partial RANBP7 gene for RANBP7/Importin7 and partial ZNF143 gene
9972	22620	35825	2.08	0.0E+00	AJ295844.1	NT	Homo sapiens partial RANBP7 gene for RANBP7/Importin7 and partial ZNF143 gene
9977	22626	35832	1.04	0.0E+00	AV695712.1	EST_HUMAN	AV695712 GKX Homo sapiens cDNA clone GKDXA07 5'
9977	22626	35833	1.04	0.0E+00	AV695712.1	EST_HUMAN	AV695712 GKX Homo sapiens cDNA clone GKDXA07 5'
9983	22631	35840	0.74	0.0E+00	AF072408.1	NT	Homo sapiens killer cell inhibitory receptor KIR2C gene, exons 2, 3, and 4
9986	22633	35843	3.11	0.0E+00	AA196387.1	EST_HUMAN	zfp97h11.1 Stratiogene muscle 937206 Homo sapiens cDNA clone IMAGE:628197 5'
10011	22659	35873	1	0.0E+00	AA131248.1	EST_HUMAN	231101.1 Soares_pregnant uterus Nih-PU Homo sapiens cDNA clone IMAGE:503545 5'
10011	22659	35874	1	0.0E+00	AA131248.1	EST_HUMAN	231101.1 Soares_pregnant uterus Nih-PU Homo sapiens cDNA clone IMAGE:503545 5'
10056	22704	35922	1.44	0.0E+00	AF176308.1	NT	Homo sapiens KIF4 (KIF4) mRNA, complete cds
10101	22749	35904	0.92	0.0E+00	BE880658.1	EST_HUMAN	601491565F1 NIH_MGC_60 Homo sapiens cDNA clone IMAGE:3893657 5'
10112	22760	35972	6.22	0.0E+00	BE730772.1	EST_HUMAN	601570712F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3845403 5'
10112	22760	35973	6.22	0.0E+00	BE730772.1	EST_HUMAN	601570712F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3845403 5'
10117	22765	35977	0.97	0.0E+00	AU127403.1	EST_HUMAN	AU127403 NT2RP2 Homo sapiens cDNA clone NT2RP2001212 5'
10127	22775	35988	0.87	0.0E+00	BE958311.1	EST_HUMAN	601045134F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3890177 5'
10127	22775	35989	0.87	0.0E+00	BE958311.1	EST_HUMAN	601045134F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3890177 5'
10144	22792	36007	0.68	0.0E+00	BE897487.1	EST_HUMAN	601432317F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3817453 5'
10154	22802	36020	0.67	0.0E+00	AA311624.1	EST_HUMAN	EST182353 Jurkat T-cells VI Homo sapiens cDNA 5' end
10155	22803	36021	1.01	0.0E+00	4768827	NT	Homo sapiens neuron III (NRXN3) mRNA
10166	22814	36032	0.67	0.0E+00	BE891113.1	EST_HUMAN	601432228F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3917588 5'
10169	22817	36035	1.13	0.0E+00	11560151	NT	Homo sapiens hypothetical G2H2 zinc finger protein FLJ22504 (FLJ22504), mRNA
10179	22827	36041	1.72	0.0E+00	AB029280.1	NT	Homo sapiens mRNA for actin binding protein ABP920, complete cds
10180	22828	36042	0.46	0.0E+00	BE304522.1	EST_HUMAN	601105459F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2887918 5'
10180	22828	36043	0.46	0.0E+00	BE304522.1	EST_HUMAN	601105459F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2887918 5'
10187	22835	36048	6.02	0.0E+00	AB006590.1	NT	Homo sapiens mRNA for estrogen receptor beta, complete cds
10187	22835	36049	6.02	0.0E+00	AB006590.1	NT	Homo sapiens mRNA for estrogen receptor beta, complete cds
10193	22841	36056	1.06	0.0E+00	AA704457.1	EST_HUMAN	219008.s1 Soares_fetal liver spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:450707 3' similar to gb:M14123_cds1 RETROVIRUS-RELATED GAG POLYPROTEIN (HUMAN);
10196	22843	36057	0.74	0.0E+00	M22921.1	NT	Human beta 1.4-galactosyl-transferase mRNA, complete cds
10187	22845	36060	5.45	0.0E+00	BF340331.1	EST_HUMAN	602037045F1 NCI_CGAP_Bm84 Homo sapiens cDNA clone IMAGE:4184839 5'

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10197	22845	36061	5.45	0.0E+00	BF340331.1	EST_HUMAN	602037045F1 NCI_CGAP_Bm04 Homo sapiens cDNA clone IMAGE:4184939 5'
10222	22870	36082	0.83	0.0E+00	BE867149.1	EST_HUMAN	601439713F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3824578 5'
10222	22870	36083	0.83	0.0E+00	BE867149.1	EST_HUMAN	601439713F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3824578 5'
10252	22900	36110	0.55	0.0E+00	AV716271.1	EST_HUMAN	AV716271 DCB Homo sapiens cDNA clone DCBBD09 5'
10252	22900	36111	0.55	0.0E+00	AV716271.1	EST_HUMAN	AV716271 DCB Homo sapiens cDNA clone DCBBD09 5'
10282	22930	36143	2.36	0.0E+00	A1631818.1	EST_HUMAN	wa38603.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2300188 3' similar to TR:Q61204
10282	22930	36144	2.36	0.0E+00	A1631818.1	EST_HUMAN	wa38603.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2300188 3' similar to TR:Q61204
10288	22936	36149	0.49	0.0E+00	11545730	NT	Q61204 NOTCH2-LIKE ;
10298	22945	36159	1.52	0.0E+00	T03078.1	EST_HUMAN	Homo sapiens Gigaaxonin (GAN), mRNA
10323	22970	36180	0.84	0.0E+00	AU122428.1	EST_HUMAN	FB23A4 Fetal brain, Stratagene Homo sapiens cDNA clone FB23A4 3'end
10329	22976	36186	0.48	0.0E+00	6005921	NT	AU122429 MAMMA1 Homo sapiens cDNA clone MAMMA1002368 5'
10348	22995	36214	2.5	0.0E+00	BF436218.1	EST_HUMAN	Homo sapiens triple functional domain (PTPRF interacting) (TRIO), mRNA
10349	22998		0.97	0.0E+00	AV654765.1	EST_HUMAN	nba45e12.x1 Scores_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3296271 3'
					AV654765.1	EST_HUMAN	AV654765 GLC Homo sapiens cDNA clone GLCDZ007 3'
10369	23015	36231	2.75	0.0E+00	AW517980.1	EST_HUMAN	xu74601.x1 NCI_CGAP_Kid8 Homo sapiens cDNA clone IMAGE:2807401 3' similar to gb:M69068 MOESIN (HUMAN);
10374	23020	36236	8.82	0.0E+00	BE546213.1	EST_HUMAN	801078784F1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3464703 5'
10389	23035	36251	0.75	0.0E+00	11436005	NT	Homo sapiens hypothetical protein DKFZp781P1010 (DKFZp781P1010), mRNA
10414	23080	36279	2.79	0.0E+00	BE781742.1	EST_HUMAN	601467418F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3870700 5'
10435	23081	36307	1.9	0.0E+00	BE082720.1	EST_HUMAN	RC2-BT0842-150200-012-d03 BT0842 Homo sapiens cDNA
10435	23081	36308	1.9	0.0E+00	BE082720.1	EST_HUMAN	RC2-BT0842-150200-012-d03 BT0842 Homo sapiens cDNA
10442	23088	36316	0.86	0.0E+00	Y08032.1	NT	Human endogenous retrovirus-K, LTR U5 and gag gene
10448	23094	36325	0.86	0.0E+00	A1658890.1	EST_HUMAN	tt54e07.x1 NCI_CGAP_GC8 Homo sapiens cDNA clone IMAGE:2244612 3'
10454	23100	36331	1.33	0.0E+00	BE743215.1	EST_HUMAN	601573995F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3835188 5'
10454	23100	36332	1.33	0.0E+00	BE743215.1	EST_HUMAN	601573995F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3835188 5'
10459	23105	36335	2.49	0.0E+00	BE617865.1	EST_HUMAN	601441723T1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3845856 3'
10459	23105	36336	2.49	0.0E+00	BE617865.1	EST_HUMAN	601441723T1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3845856 3'
10481	23127	36355	0.57	0.0E+00	H39805.1	EST_HUMAN	yp01e10.r1 Scores breast 3NtHBst Homo sapiens cDNA clone IMAGE:186138 5'
10508	23154	36380	1.01	0.0E+00	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
10510	23158	36382	0.45	0.0E+00	AF081984.1	NT	Synthetic construct CD30 ligand-ecotactin A fusion protein (CD30L-ETA fusion) mRNA, partial cds
10519	23165	36392	1.02	0.0E+00	BE172254.1	EST_HUMAN	MRO-HT0559-270300-006-e12 HT0559 Homo sapiens cDNA
10519	23165	36393	1.02	0.0E+00	BE172254.1	EST_HUMAN	MRO-HT0559-270300-006-e12 HT0559 Homo sapiens cDNA
10532	23229	36483	2.76	0.0E+00	AV711076.1	EST_HUMAN	AV711076 Cu Homo sapiens cDNA clone CuAAKG05 5'

Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10532	23229	36484	2.76	0.0E+00	AV711075.1	EST_HUMAN	AV711075 Cu Homo sapiens cDNA clone CuAAKG05 5'
10534	23231		2.13	0.0E+00	AW813783.1	EST_HUMAN	RC3-ST0197-120200-015-403 ST0197 Homo sapiens cDNA
10542	23238	36472	7.02	0.0E+00	AW963563.1	EST_HUMAN	EST375636 IMAGE resequencing, MAGH Homo sapiens cDNA
10555	23251	36487	3.19	0.0E+00	11431124	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 3 (ABCA3), mRNA
10555	23251	36488	3.19	0.0E+00	11431124	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 3 (ABCA3), mRNA
10559	23255	36492	2.09	0.0E+00	AW057621.1	EST_HUMAN	wy61f09.x1 Soares_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:2553065 3' similar to TR:Q60508 Q60506 VDX;
10567	23262	36499	1.6	0.0E+00	BE243270.1	EST_HUMAN	TCAAP3D0917 Pediatric acute myelogenous leukemia cell (FAB M1) Baylor-HGSC project= TCAA Homo sapiens cDNA clone TCAAP0917
10568	23263	36500	2.85	0.0E+00	AI652239.1	EST_HUMAN	wb28a12.x1 NCI_GGAP_G08 Homo sapiens cDNA clone IMAGE:2306974 3' similar to contains element MSR1 MSR1 repetitive element;
10568	23263	36501	2.85	0.0E+00	AI652239.1	EST_HUMAN	wb28a12.x1 NCI_GGAP_G08 Homo sapiens cDNA clone IMAGE:2306974 3' similar to contains element MSR1 MSR1 repetitive element;
10573	23268	36506	1.54	0.0E+00	BF306642.1	EST_HUMAN	601888704F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4122849 5'
10580	23275	36512	5.08	0.0E+00	11546911	NT	Homo sapiens NOD2 protein (NOD2), mRNA
10580	23275	36513	5.08	0.0E+00	11545911	NT	Homo sapiens NOD2 protein (NOD2), mRNA
10586	23290	36528	1.98	0.0E+00	AW404795.1	EST_HUMAN	U1HF-BLO-actn-4-04-U1.r1 NIH_MGC_37 Homo sapiens cDNA clone IMAGE:3050383 5'
10600	23294	36533	3.17	0.0E+00	11424826	NT	Homo sapiens hypothetical protein FLJ20079 (FLJ20079), mRNA
10601	23295	36534	7.47	0.0E+00	4504536	NT	Homo sapiens 5-hydroxytryptamine (serotonin) receptor 1E (HTR1E) mRNA
10601	23295	36535	7.47	0.0E+00	4504536	NT	Homo sapiens 5-hydroxytryptamine (serotonin) receptor 1E (HTR1E) mRNA
10602	23296	36536	3.68	0.0E+00	AI691827.1	EST_HUMAN	wu32b06.x1 Soares_Dieckgraebe_colon_NHCD Homo sapiens cDNA clone IMAGE:2521715 3'
10605	23298	36540	4.48	0.0E+00	BE682109.1	EST_HUMAN	601505204F2 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3906865 5'
10608	23303	36542	8.24	0.0E+00	BE981630.1	EST_HUMAN	601434522F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3919636 5'
10612	23306	36544	1.66	0.0E+00	8923939	NT	Homo sapiens myosin, heavy polypeptide 2, skeletal muscle, adult (MYH2), mRNA
10612	23306	36545	1.66	0.0E+00	8923939	NT	Homo sapiens myosin, heavy polypeptide 2, skeletal muscle, adult (MYH2), mRNA
10619	23312	36551	1.4	0.0E+00	AB014608.1	NT	Homo sapiens mRNA for KIAA0708 protein, partial cds
10619	23312	36552	1.4	0.0E+00	AB014608.1	NT	Homo sapiens mRNA for KIAA0708 protein, partial cds
10628	23321	36559	1.31	0.0E+00	BE903304.1	EST_HUMAN	601674332F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3957343 5'
10631	19484	31403	1.65	0.0E+00	AA195905.1	EST_HUMAN	zp95b.11.1 Striatagene muscle 937209 Homo sapiens cDNA clone IMAGE:627933 5' similar to gb:X03740
10652	23343	36581	5.53	0.0E+00	BE793498.1	EST_HUMAN	MYOSIN HEAVY CHAIN, SKELETAL MUSCLE (HUMAN);
10660	23351	36588	1.78	0.0E+00	BE729706.1	EST_HUMAN	601588829F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3943015 5'
10660	23351	36589	1.79	0.0E+00	BE729706.1	EST_HUMAN	601562864F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3832575 5'
10661	23352	36590	33.99	0.0E+00	AV727362.1	EST_HUMAN	601562864F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3832575 5'

Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10681	23352	36591	33.99	0.0E+00	AV727362.1	EST_HUMAN	AV727362 HTC Homo sapiens cDNA clone HTCAQH08 5'
10674	23365	36608	9.59	0.0E+00	AW510055.1	EST_HUMAN	xy04g10.x1 NCL CGAP_Lym12 Homo sapiens cDNA clone IMAGE:2852228 3' similar to gb:M60834 40S RIBOSOMAL PROTEIN S16 (HUMAN);
10680	23371	36613	3.18	0.0E+00	AU135741.1	EST_HUMAN	AU135741 PLACE1 Homo sapiens cDNA clone PLACE1002794 5'
10686	23377	36617	3.41	0.0E+00	AW586333.1	EST_HUMAN	hg13d02.x1 Scores_NFL_T_QBC_S1 Homo sapiens cDNA clone IMAGE:2845475 3' similar to contains element MSR1 repetitive element;
10686	23377	36618	3.41	0.0E+00	AW586333.1	EST_HUMAN	hg13d02.x1 Scores_NFL_T_QBC_S1 Homo sapiens cDNA clone IMAGE:2845475 3' similar to contains element MSR1 repetitive element;
10686	23377	36619	3.41	0.0E+00	AW586333.1	EST_HUMAN	hg13d02.x1 Scores_NFL_T_QBC_S1 Homo sapiens cDNA clone IMAGE:2845475 3' similar to contains element MSR1 repetitive element;
10688	23379	36620	1.89	0.0E+00	Z34897.1	NT	H. sapiens mRNA for H1 histamine receptor
10689	23380	36621	2.97	0.0E+00	F13089.1	EST_HUMAN	HSC3C031 normalized Infant brain cDNA Homo sapiens cDNA clone c-3lc03
10700	23391	36628	1.79	0.0E+00	D10083.1	NT	Homo sapiens RGH1 gene, retrovirus-like element
10706	23396	36634	1.33	0.0E+00	4758281	NT	Homo sapiens EphA7 (EPHA7) mRNA
10706	23396	36635	1.33	0.0E+00	4758281	NT	Homo sapiens EphA7 (EPHA7) mRNA
10718	23407	36648	2.13	0.0E+00	AW338094.1	EST_HUMAN	xw6601.x1 NCL CGAP_Pen1 Homo sapiens cDNA clone IMAGE:2832885 3' similar to gb:X17116 IG MU CHAIN C REGION (HUMAN);
10719	23408	36649	4.62	0.0E+00	AW451230.1	EST_HUMAN	U1-H-B13-eth-e-01-0-U1.e1 NCL CGAP_Sub5 Homo sapiens cDNA clone IMAGE:2736849 3'
10719	23408	36650	4.62	0.0E+00	AW451230.1	EST_HUMAN	U1-H-B13-eth-e-01-0-U1.e1 NCL CGAP_Sub5 Homo sapiens cDNA clone IMAGE:2736849 3'
10721	13021		11.67	0.0E+00	4506632	NT	Homo sapiens ribosomal protein L31 (RPL31) mRNA
10723	23411	36652	2.63	0.0E+00	AB014567.1	NT	Homo sapiens mRNA for KIAA0667 protein, partial cds
10738	23425	36670	1.96	0.0E+00	BE286449.1	EST_HUMAN	801119248F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3029219 5'
10754	23439	36683	2.04	0.0E+00	AB011117.1	NT	Homo sapiens mRNA for KIAA0545 protein, partial cds
10763	23447		1.71	0.0E+00	AU124108.1	EST_HUMAN	AU124108 NT2RM2 Homo sapiens cDNA clone NT2RM2001675 5'
10771	23454	36697	1.45	0.0E+00	AB028040.1	NT	Homo sapiens mRNA for KIAA1117 protein, partial cds
10771	23454	36698	1.45	0.0E+00	AB028040.1	NT	Homo sapiens mRNA for KIAA1117 protein, partial cds
10777	23459	36702	4.04	0.0E+00	BE762185.1	EST_HUMAN	8011682046F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3836539 5'
10777	23460		59.14	0.0E+00	BE684061.1	EST_HUMAN	802141405F1 NIH_MGC_46 Homo sapiens cDNA clone IMAGE:4302432 5'
10778	23461	36703	1.3	0.0E+00	BE269268.1	EST_HUMAN	801166342F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3644259 5'
10781	23484	36706	5.6	0.0E+00	AU118386.1	EST_HUMAN	AU118386 HEMBA1 Homo sapiens cDNA clone HEMBA1003486 5'
10788	23488	36710	6.53	0.0E+00	A1149809.1	EST_HUMAN	qf43c03.x1 Scores_testis_NHT Homo sapiens cDNA clone IMAGE:1752772 3'
10788	23488	36711	6.53	0.0E+00	A1149809.1	EST_HUMAN	qf43c03.x1 Scores_testis_NHT Homo sapiens cDNA clone IMAGE:1752772 3'
10787	23470	36712	3.04	0.0E+00	AW391937.1	EST_HUMAN	QV4-S10234-121199-032-b06 ST0234 Homo sapiens cDNA



Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10798	23481	36721	4.39	0.0E+00	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
10798	23481	36722	4.39	0.0E+00	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
10807	23480	36726	9.57	0.0E+00	11424728	NT	Homo sapiens insulin receptor (INSR), mRNA
10814	23497	36733	1.42	0.0E+00	AW804516.1	EST_HUMAN	QV0-UM0083-170400-191-408 UM0083 Homo sapiens cDNA
10814	23497	36734	1.42	0.0E+00	AW804516.1	EST_HUMAN	QV0-UM0083-170400-191-408 UM0083 Homo sapiens cDNA
10815	23498	36736	1.6	0.0E+00	BF340308.1	EST_HUMAN	802037014F1 NCL CGAP_Brm64 Homo sapiens cDNA clone IMAGE:4184979 5'
10817	23500	36738	52.94	0.0E+00	BE281209.1	EST_HUMAN	601148357F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3163310 5'
10821	23504	36743	2.37	0.0E+00	AB028040.1	NT	Homo sapiens mRNA for KIAA1117 protein, partial cds
10824	23607	36746	1.69	0.0E+00	AB007932.1	NT	Homo sapiens mRNA for KIAA0463 protein, partial cds
10828	23510	36750	3.47	0.0E+00	U50326.1	NT	Human protein kinase C substrate 80K-H (PRKCSH) gene, exon 15-17
10832	23514	36755	1.55	0.0E+00	BE773036.1	EST_HUMAN	RC1-FT0134-170700-012-407 FT0134 Homo sapiens cDNA
10832	23514	36756	1.55	0.0E+00	BE773036.1	EST_HUMAN	RC1-FT0134-170700-012-407 FT0134 Homo sapiens cDNA
10836	23520	36762	1.47	0.0E+00	W21826.1	EST_HUMAN	57E10 Human retina cDNA 1 sp5081-cleaved sublibrary/Homo sapiens cDNA not directional
10854	23534	36779	136.91	0.0E+00	AA740782.1	EST_HUMAN	cd32a07.s1 NCL CGAP_Kid5 Homo sapiens cDNA clone IMAGE:1325412 3' similar to contains element
10857	23537	36783	2.05	0.0E+00	AW469222.1	EST_HUMAN	MSR1 repetitive element;
10863	23543	36790	2.91	0.0E+00	AF252303.1	NT	he04h04.x1 NCL CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2872759 3'
10879	23559	36806	7.34	0.0E+00	C05089.1	EST_HUMAN	Homo sapiens signalling lymphocyte activation molecule (SLAM) gene, exon 2
10886	23566	36814	2.31	0.0E+00	AA746375.1	EST_HUMAN	QV5089 Human heart cDNA (YNakamura) Homo sapiens cDNA clone 3NHC4817
10886	23566	36815	2.31	0.0E+00	AA746375.1	EST_HUMAN	cd55h01.1 NCL CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1309009 5'
10895	23575	36825	3.74	0.0E+00	M78448.1	EST_HUMAN	cd55h01.1 NCL CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1309009 5'
10895	23575	36826	3.74	0.0E+00	M78448.1	EST_HUMAN	EST00598 Fetal brain, Strategene (cat#836208) Homo sapiens cDNA clone HFBCC28
10898	23578	36827	6.82	0.0E+00	AL157908.1	EST_HUMAN	EST00598 Fetal brain, Strategene (cat#836208) Homo sapiens cDNA clone HFBCC28
10910	23590	36836	5.81	0.0E+00	AU116988.1	EST_HUMAN	DKFZp761J2116_r1 761 (synonym: hary2) Homo sapiens cDNA clone DKFZp761J2116 5'
10924	23604	36863	1.64	0.0E+00	AV693656.1	EST_HUMAN	AU116988 HEMBA1 Homo sapiens cDNA clone HEMBA1000424 5'
10932	23612	36882	2.09	0.0E+00	BF366563.1	EST_HUMAN	AV693656 GK Homo sapiens cDNA clone GKCCN03 5'
10955	18399	31311	2.73	0.0E+00	AB035266.1	NT	IL3-N10104-200500-143-A07 NT0104 Homo sapiens cDNA
10955	18399	31312	2.73	0.0E+00	AB035266.1	NT	Homo sapiens mRNA for neuridin II, complete cds
10990	23638	36887	2.64	0.0E+00	BE182360.1	EST_HUMAN	Homo sapiens mRNA for neuridin II, complete cds
10990	23638	36888	2.64	0.0E+00	BE182360.1	EST_HUMAN	PMO-HT0845-060500-002-E05 HT0845 Homo sapiens cDNA
10991	23637		1.4	0.0E+00	AV701152.1	EST_HUMAN	PMO-HT0845-060500-002-E05 HT0845 Homo sapiens cDNA
10990	23655	36908	4.07	0.0E+00	BE898423.1	EST_HUMAN	AV701152 ADA Homo sapiens cDNA clone ADAAA006 5'
							601439092F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3824142 5'

Table 4

## Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
10889	23663	36919	1.85	0.0E+00	AW500307.1	EST_HUMAN	UHF-BN0-ekg-4-02-0-UJ-1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3077019 5'
10889	23663	36920	1.85	0.0E+00	AW500307.1	EST_HUMAN	UHF-BN0-ekg-4-02-0-UJ-1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3077019 5'
							bb78c04.y1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3048488 5' similar to gb:Y00345_cds1 POLYADENYLATE-BINDING PROTEIN (HUMAN); gb:X65563 M.musculus mRNA for poly(A) binding protein (MOUSE);
10892	23666	36923	2.39	0.0E+00	BE018283.1	EST_HUMAN	
11016	23688	36949	1.77	0.0E+00	BF528907.1	EST_HUMAN	602043377F1 NCI_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4181083 5'
11016	23688	36950	1.77	0.0E+00	BF528907.1	EST_HUMAN	602043377F1 NCI_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4181083 5'
11016	23688	36951	1.77	0.0E+00	BF528907.1	EST_HUMAN	602043377F1 NCI_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4181083 5'
11028	25133	36964	1.27	0.0E+00	AW387766.1	EST_HUMAN	MR4-ST0118-041088-010-A12 ST0118 Homo sapiens cDNA
11028	25133	36965	1.27	0.0E+00	AW387766.1	EST_HUMAN	MR4-ST0118-041088-010-A12 ST0118 Homo sapiens cDNA
11034	23705	36973	1.53	0.0E+00	4758281	NT	Homo sapiens EphA7 (EPHA7) mRNA
11035	23706	36974	8.73	0.0E+00	BE5897953.1	EST_HUMAN	601440446F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3925403 5'
11037	23708	36977	1.89	0.0E+00	AF459545.1	EST_HUMAN	sc88g11.x1 Schiller meningioma Homo sapiens cDNA clone IMAGE:1952804 3'
11037	23708	36978	1.89	0.0E+00	AF459545.1	EST_HUMAN	sc88g11.x1 Schiller meningioma Homo sapiens cDNA clone IMAGE:1952804 3'
11051	23721	36992	2.76	0.0E+00	ALD42278.1	EST_HUMAN	DKFZp434L0120.1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434L0120 5'
11083	23753	37028	1.61	0.0E+00	10880882	NT	Homo sapiens gephyrin (GPH) mRNA
11085	23755	37031	3.98	0.0E+00	4758827	NT	Homo sapiens neurodin III (NRDN3) mRNA
11086	23758	37032	2.67	0.0E+00	BF206561.1	EST_HUMAN	601870802F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4101433 5'
11091	23761	37036	12.22	0.0E+00	AW207794.1	EST_HUMAN	UHF-BI2-egs-h-01-0-UJ-1 NCI_CGAP_Sub4 Homo sapiens cDNA clone IMAGE:2724312 3'
11096	23766	37040	4.23	0.0E+00	AB018280.1	NT	Homo sapiens mRNA for KIAA0717 protein, partial cds
11096	23768	37041	4.23	0.0E+00	AB018280.1	NT	Homo sapiens mRNA for KIAA0717 protein, partial cds
11098	23768	37043	2.69	0.0E+00	BE208846.1	EST_HUMAN	ba04d07.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823373 5' similar to TR:O76022 O76022 E1B 55KDA-ASSOCIATED PROTEIN.;
11098	23768	37044	2.69	0.0E+00	BE208846.1	EST_HUMAN	ba04d07.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823373 5' similar to TR:O76022 O76022 E1B 55KDA-ASSOCIATED PROTEIN.;
11110	23780	37055	1.9	0.0E+00	11528409	NT	Homo sapiens KIAA0428 gene product (KIAA0428), mRNA
11124	23783	37069	1.52	0.0E+00	11024711	NT	Homo sapiens myosin, heavy polypeptide 4, skeletal muscle (MYH4), mRNA
11127	20052	33133	1.5	0.0E+00	L32832.1	NT	Homo sapiens zinc finger homeodomain protein (ATBF1-A) mRNA, complete cds
11131	23789	37074	3.84	0.0E+00	BE148076.1	EST_HUMAN	RC3-HT0230-040500-110-h04 HT0230 Homo sapiens cDNA
11131	23789	37075	3.84	0.0E+00	BE148076.1	EST_HUMAN	RC3-HT0230-040500-110-h04 HT0230 Homo sapiens cDNA
11154	23821	37101	1.96	0.0E+00	AW673469.1	EST_HUMAN	ba54d08.y3 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2900387 5' similar to TR:O60275 O60275 KIAA0522 PROTEIN;
11154	23821	37102	1.96	0.0E+00	AW673469.1	EST_HUMAN	ba54d08.y3 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2900387 5' similar to TR:O60275 O60275 KIAA0522 PROTEIN;

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Table 4

## Single Exon Probes Expressed in Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11176	23843	37128	6.21	0.0E+00	BF507876.1	EST_HUMAN	UIH-B14-ack-b-10-0-UI.s1 NCJ CGAP Sub8 Homo sapiens cDNA clone IMAGE:3086028 3'
11176	23843	37128	6.21	0.0E+00	BF507876.1	EST_HUMAN	UIH-B14-ack-b-10-0-UI.s1 NCJ CGAP Sub8 Homo sapiens cDNA clone IMAGE:3086028 3'
11185	23850	37136	1.57	0.0E+00	AU135170.1	EST_HUMAN	AU135170 PLACE1 Homo sapiens cDNA clone PLACE1001381 5'
11189	23854	37140	1.82	0.0E+00	BF576138.1	EST_HUMAN	602132459F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4271630 5'
11189	23854	37141	1.82	0.0E+00	BF576138.1	EST_HUMAN	602132459F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4271630 5'
11190	23855	37142	1.67	0.0E+00	BF086811.1	EST_HUMAN	RC3-GN0088-190900-011-c08 GN0088 Homo sapiens cDNA
11182	23857	37143	5.5	0.0E+00	BE578401.1	EST_HUMAN	601486828F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3889207 5'
11182	23857	37144	5.5	0.0E+00	BE578401.1	EST_HUMAN	601486828F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3889207 5'
11199	23864	37150	1.94	0.0E+00	D87682.1	NT	Human mRNA for KIAA0241 gene, partial cds
11204	23868		5.95	0.0E+00	BF240538.1	EST_HUMAN	601875530F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:4086710 5'
11218	23881	37166	2.04	0.0E+00	AB037737.1	NT	Homo sapiens mRNA for KIAA1316 protein, partial cds
11218	23881	37167	2.04	0.0E+00	AB037737.1	NT	Homo sapiens mRNA for KIAA1316 protein, partial cds
11222	23885	37170	4.17	0.0E+00	11430868	NT	Homo sapiens retinoblastoma-like 2 (p130) (RBL2), mRNA
11222	23885	37171	4.17	0.0E+00	11430868	NT	Homo sapiens retinoblastoma-like 2 (p130) (RBL2), mRNA
11230	23893	37179	1.8	0.0E+00	AA772837.1	EST_HUMAN	ee74g04.s1 Striatogene schizoa brain S11 Homo sapiens cDNA clone IMAGE:969042 3'
11241	23903	37192	1.62	0.0E+00	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
11241	23903						Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
11244	23906	37198	1.62	0.0E+00	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
11251	23913	37205	1.36	0.0E+00	BF578267.1	EST_HUMAN	602134132F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4286502 5'
11254	23916	37209	5.84	0.0E+00	AW328173.1	EST_HUMAN	dfo4g05.x1 NIH_MGC_3 Homo sapiens cDNA clone IMAGE:284717 5'
11268	23920		71.88	0.0E+00	M55083.1	NT	Human gamma actin-like pseudogene, complete cds
11264	23926	37216	2.93	0.0E+00	BF306896.1	EST_HUMAN	601886823F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4123948 5'
11264	23926	37217	2.93	0.0E+00	BF306896.1	EST_HUMAN	601886823F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4123948 5'
11271	23932	37225	105.67	0.0E+00	BF362462.1	EST_HUMAN	QV2-NN0054-230800-333-c04 NN0054 Homo sapiens cDNA
11281	23952	37249	2.34	0.0E+00	U36284.1	NT	Human beta-prime-adaptin (BAM22) gene, exon 16
11291	23952	37250	2.34	0.0E+00	U36284.1	NT	Human beta-prime-adaptin (BAM22) gene, exon 16
11295	23966		3.03	0.0E+00	BE5897051.1	EST_HUMAN	601436905F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3924577 5'
11296	23967		1.73	0.0E+00	4503786	NT	Homo sapiens fyn-related kinase (FRK) mRNA
11310	23968	37271	3.55	0.0E+00	8923988	NT	Homo sapiens golgin-like protein (GLP), mRNA
11313	23972		2.69	0.0E+00	BF207682.1	EST_HUMAN	601861947F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:4081715 5'
11314	23973		2.03	0.0E+00	BE257744.1	EST_HUMAN	601116705F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3357384 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
11327	24018	37321	4.02	0.0E+00	BE206848.1	EST_HUMAN	ba04d07.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823373 5' similar to TR:O78022 O78022 E1B-55KDA-ASSOCIATED PROTEIN.;
11327	24018	37322	4.02	0.0E+00	BE206846.1	EST_HUMAN	ba04d07.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823373 5' similar to TR:O78022 O78022 E1B-55KDA-ASSOCIATED PROTEIN.;
11328	24020	37324	3.88	0.0E+00	AW753028.1	EST_HUMAN	QV0-CT0225-101298-071-408 CT0225 Homo sapiens cDNA
11334	24025		3.06	0.0E+00	AA588707.1	EST_HUMAN	n42c08.s1 NCI_CGAP_P4 Homo sapiens cDNA clone IMAGE:1043342 similar to gb:M65178 ALPHA-ACTININ 1, CYTOSKELETAL ISOFORM (HUMAN);
11335	18000	30623	3.84	0.0E+00	AB34454.1	EST_HUMAN	wp08g08.x1 NCI_CGAP_Kd12 Homo sapiens cDNA clone IMAGE:2404084 3'
11336	24026	37330	7.45	0.0E+00	AW327865.1	EST_HUMAN	dr02b08.x1 NIH_MGC_3 Homo sapiens cDNA clone IMAGE:2846919 5'
11355	25134	37348	1.89	0.0E+00	AW282776.1	EST_HUMAN	UIH-BW0-ej-d-07-0-UJ.s1 NCI_CGAP_Sub6 Homo sapiens cDNA clone IMAGE:2728509 3'
11362	23173	38401	2.2	0.0E+00	4758827	NT	Homo sapiens neurodin III (NRXN3) mRNA
11368	23975	37276	1.73	0.0E+00	BE264068.1	EST_HUMAN	601113903F1 NIH_MGC_18 Homo sapiens cDNA clone IMAGE:3354600 5'
11371	23978	37278	1.74	0.0E+00	BE965909.2	EST_HUMAN	601659088F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3885916 3'
11371	23978	37279	1.74	0.0E+00	BE965909.2	EST_HUMAN	601659088F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3885916 3'
11372	23979	37280	4.62	0.0E+00	BE186866.1	EST_HUMAN	IL5-HT0731-0205000-077-405 HT0731 Homo sapiens cDNA
11373	23980		1.29	0.0E+00	BF513980.1	EST_HUMAN	UIH-BW1-ami-e-05-0-UJ.s1 NCI_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3071121 3'
11387	23983	37284	7.81	0.0E+00	AL046540.1	EST_HUMAN	DKFZp434G178_l1_434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434G178 5'
11387	23983	37285	7.81	0.0E+00	AL046540.1	EST_HUMAN	DKFZp434G178_l1_434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434G178 5'
11397	24003	37306	5.89	0.0E+00	AB23116.1	EST_HUMAN	wn83g03.x1 NCI_CGAP_UH1 Homo sapiens cDNA clone IMAGE:2452468 3' similar to gb:S37431 LAMININ RECEPTOR (HUMAN);
11401	24050	37363	3.42	0.0E+00	AA780913.1	EST_HUMAN	ncz11c07.s1 NCI_CGAP_GC81 Homo sapiens cDNA clone IMAGE:1287468 3' similar to TR:Q13686 Q13686 ALKB HOMOLOG PROTEIN.;
11401	24050	37364	3.42	0.0E+00	AA780913.1	EST_HUMAN	ncz11c07.s1 NCI_CGAP_GC81 Homo sapiens cDNA clone IMAGE:1287468 3' similar to TR:Q13686 Q13686 ALKB HOMOLOG PROTEIN.;
11406	24055	37360	1.94	0.0E+00	BE910546.1	EST_HUMAN	601501090F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3902926 5'
11416	23183	36413	7.9	0.0E+00	BE576347.1	EST_HUMAN	727F12.x1 NCI_CGAP_GLL1 Homo sapiens cDNA clone IMAGE:3295919 3' similar to TR:O00409 O00409 CHECKPOINT SUPPRESSOR 1.;
11419	23186	36416	1.79	0.0E+00	BE516666.1	EST_HUMAN	601278335F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3611144 5'
11419	23186	36417	1.79	0.0E+00	BE516666.1	EST_HUMAN	601278335F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3611144 5'
11426	23183	36424	1.81	0.0E+00	AV757420.1	EST_HUMAN	AV757420 BM Homo sapiens cDNA clone BMFAGH03 5'
11467	24061	37367	1.52	0.0E+00	Y18900.1	NT	Human endogenous retrovirus type K (HERV-K), gag, pol and env genes
11467	24064	37370	10.31	0.0E+00	L39891.1	NT	Homo sapiens polyoma kidney disease-associated protein (PKD1) gene, complete cds
11467	24064	37371	10.31	0.0E+00	L39891.1	NT	Homo sapiens polyoma kidney disease-associated protein (PKD1) gene, complete cds
11476	24077	37387	4.89	0.0E+00	AU138211.1	EST_HUMAN	AU138211 PLACE1 Homo sapiens cDNA clone PLACE100807 5'

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11401	24092	37404	1.92	0.0E+00	BE02317.1	EST_HUMAN	601441086F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3916270 5'
11518	24118	37428	1.42	0.0E+00	AB036834.1	EST_HUMAN	601441086F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3916270 5'
11528	24129	37434	13.78	0.0E+00	BE748889.1	EST_HUMAN	601572186T1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:3839012 3'
11529	24129	37436	13.78	0.0E+00	BE748889.1	EST_HUMAN	601572186T1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:3839012 3'
11639	24139	37447	1.81	0.0E+00	AU141882.1	EST_HUMAN	60141882 THYRO1 Homo sapiens cDNA clone THYRO1001398 5'
11639	24139	37448	1.81	0.0E+00	AU141882.1	EST_HUMAN	60141882 THYRO1 Homo sapiens cDNA clone THYRO1001398 5'
11542	24142	37451	2.08	0.0E+00	AW006022.1	EST_HUMAN	wz91h01.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2566225 3' similar to WP:F53H10.2 CE11040 ZINC FINGER, C2H2 TYPE:
11546	25135	37455	3.49	0.0E+00	BF002333.1	EST_HUMAN	7h22b10.x1 NCI_CGAP_Cot16 Homo sapiens cDNA clone IMAGE:3316899 3' similar to TR:Q13458 Q13458 TRIO ;
11571	24170	37486	2.88	0.0E+00	AW387776.1	EST_HUMAN	MRA-ST0118-261089-012-b03 ST0118 Homo sapiens cDNA
11571	24170	37486	2.88	0.0E+00	AW387776.1	EST_HUMAN	MRA-ST0118-261089-012-b03 ST0118 Homo sapiens cDNA
11582	24181	37521	2.41	0.0E+00	AW863777.1	EST_HUMAN	MR3-SN0010-310300-107-b03 SN0010 Homo sapiens cDNA
11601	24200	37521	4.76	0.0E+00	11435244	NT	Homo sapiens KIAA0247 gene product (KIAA0247), mRNA
11601	24200	37522	4.76	0.0E+00	11435244	NT	Homo sapiens KIAA0247 gene product (KIAA0247), mRNA
11608	24206	37529	5.87	0.0E+00	U36253.1	NT	Human beta-prime-adaptin (BAM22) gene, exon 5
11612	24210	37533	2.29	0.0E+00	BE379254.1	EST_HUMAN	601237691F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3609623 5'
11612	24210	37534	2.29	0.0E+00	BE379254.1	EST_HUMAN	601237691F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3609623 5'
11632	24229	37553	2.22	0.0E+00	BE794758.1	EST_HUMAN	601500588F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3644708 5'
11634	24231	37554	45.09	0.0E+00	BE879633.1	EST_HUMAN	601491821F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3694220 5'
11640	24237	37560	1.62	0.0E+00	4759827	NT	Homo sapiens neurabin III (NRXN3) mRNA
11640	24237	37561	1.62	0.0E+00	4759827	NT	Homo sapiens neurabin III (NRXN3) mRNA
11644	24241	37565	1.65	0.0E+00	AF053543.1	NT	Homo sapiens glutathione transferase zeta 1 (GSTZ1) gene, exons 6 and 7
11646	24243	37565	1.56	0.0E+00	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
11653	24250	37572	14.06	0.0E+00	BE409693.1	EST_HUMAN	601299403F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3629544 5'
11654	24251	37573	1.46	0.0E+00	BE149650.1	EST_HUMAN	MRO-HT0241-150500-011-402 HT0241 Homo sapiens cDNA
11655	24252	37674	2.69	0.0E+00	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
11655	24252	37675	2.69	0.0E+00	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
11657	18187	30878	1.29	0.0E+00	D28635.1	NT	Human gene for dihydropyrimidine succinyltransferase, complete cds (exon 1-15)
11657	18187	30879	1.29	0.0E+00	D28635.1	NT	Human gene for dihydropyrimidine succinyltransferase, complete cds (exon 1-15)
11658	24254	37576	5.6	0.0E+00	BF681641.1	EST_HUMAN	602155722F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4296725 5'
11658	24254	37577	5.6	0.0E+00	BF681641.1	EST_HUMAN	602155722F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4296725 5'

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11662	24258		1.93	0.0E+00	6006002	NT	Homo sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 2A (GRIN2A) mRNA
11664	17606	30583	1.5	0.0E+00	AF272683.1	NT	Homo sapiens gephyrin mRNA, complete cds
11667	24262	37598	1.71	0.0E+00	AU132940.1	EST_HUMAN	AU132940 NT2RP4 Homo sapiens cDNA clone NT2RP4000829 5'
11670	24265	37598	1.35	0.0E+00	BE903372.1	EST_HUMAN	601676357F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3958935 5'
11687	24282	37604	2.5	0.0E+00	X51755.1	NT	Human lambrate-immunoglobulin constant region complex (germline)
11687	24282	37605	2.5	0.0E+00	X51755.1	NT	Human lambrate-immunoglobulin constant region complex (germline)
11728	25136		15.74	0.0E+00	BF309120.1	EST_HUMAN	601680534F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3632688 5'
11737	24330	37654	11.96	0.0E+00	BE297175.1	EST_HUMAN	601177407F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3632688 5'
11751	24342	37671	1.3	0.0E+00	BE744311.1	EST_HUMAN	601576525F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3837222 5'
11751	24342	37672	1.3	0.0E+00	BE744311.1	EST_HUMAN	601576525F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3837222 5'
11757	24348	37678	1.43	0.0E+00	BE257612.1	EST_HUMAN	601113009F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3363378 5'
11757	24348	37679	1.43	0.0E+00	BE257612.1	EST_HUMAN	601113009F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3363378 5'
11755	24375	37705	1.68	0.0E+00	BE257698.1	EST_HUMAN	601114240F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3354872 5'
11790	24390	37710	1.68	0.0E+00	AW749184.1	EST_HUMAN	PM1-BT0348-151298-001-c11 BT0348 Homo sapiens cDNA
11790	24390	37711	1.68	0.0E+00	AW749184.1	EST_HUMAN	PM1-BT0348-151298-001-c11 BT0348 Homo sapiens cDNA
11792	24382	37713	2.23	0.0E+00	AW307811.1	EST_HUMAN	MR0-HT0168-271199-005-g03 HT0168 Homo sapiens cDNA
11792	24382	37714	2.23	0.0E+00	AW307811.1	EST_HUMAN	MR0-HT0168-271199-005-g03 HT0168 Homo sapiens cDNA
11797	24387	37720	2.46	0.0E+00	AU117974.1	EST_HUMAN	AU117974 HEMBA1 Homo sapiens cDNA clone HEMBA1002812 5'
11797	24387	37721	2.46	0.0E+00	AU117974.1	EST_HUMAN	AU117974 HEMBA1 Homo sapiens cDNA clone HEMBA1002812 5'
11808	14946		1.31	0.0E+00	U36284.1	NT	Human beta-prime-adaptin (BAM22) gene, exon 16
11821	16891	31859	2.45	0.0E+00	U87223.1	NT	Human beta2-chimerin mRNA, complete cds
11822	24407	37741	5.54	0.0E+00	Z31706.1	NT	H. sapiens GLAST1 gene for glial glutamate transporter, exon6
11835	24419	37760	2.26	0.0E+00	A0656185.1	EST_HUMAN	tt39102.x1 NC1 CGAP GC8 Homo sapiens cDNA clone IMAGE:2243067 3' similar to SW:CG2G_HUMAN
11837	24421	37762	2.31	0.0E+00	AU132394.1	EST_HUMAN	P51059 G2MTOTIC-SPECIFIC CYCLIN G1 ;
11879	25399	30900	2.27	0.0E+00	BE312542.1	EST_HUMAN	AU132394 NT2RP3 Homo sapiens cDNA clone NT2RP3004339 5'
11883	25287		3.89	0.0E+00	A180963.1	EST_HUMAN	601150023F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3503020 5'
11802	24498		1.6	0.0E+00	AB011399.1	NT	gel17b12.x1 Soares fetal lung NihL19W Homo sapiens cDNA clone IMAGE:1739231 3'
11821	24482		4.9	0.0E+00	AL163246.2	NT	Homo sapiens gene for AF-6, complete cds
11829	24488		4.1	0.0E+00	11417862	NT	Homo sapiens chromosome 21 segment HS21C046
11947	24501		3.05	0.0E+00	5902973	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
11982	25218	30816	2.59	0.0E+00	AF240788.1	NT	Homo sapiens antioxidant protein 1 (AOP1), nuclear gene encoding mitochondrial protein, mRNA
11993	25226		5.39	0.0E+00	AL041831.1	EST_HUMAN	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
							DKFZp494K0819_r1 434 (synonym: htae3) Homo sapiens cDNA clone DKFZp434K0819 5'

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12015	25309		3.12	0.0E+00	11418318	NT	Homo sapiens G-2 and S-phase expressed 1 (GTSE1), mRNA
12023	24551		3.91	0.0E+00	AL046544.1	EST_HUMAN	DKFZp434G218.1 434 (synonym: hhes3) Homo sapiens cDNA clone DKFZp434G218.5
12037	25281		1.69	0.0E+00	AI803497.1	EST_HUMAN	IL-BT030-271098-001 BT030 Homo sapiens cDNA
12076	25390		1.52	0.0E+00	N64484.1	EST_HUMAN	y40e08.x1 Soares fetal liver spleen 1NLS Homo sapiens cDNA clone IMAGE:245222 3' similar to SW-POL_BAEVM P10272 POL POLYPROTEIN;
12089	24594		5.88	0.0E+00	AF106658.1	NT	Homo sapiens adenylsuccinate lyase gene, complete cds
12092	13593	26262	3.39	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
12092	13593	26263	3.39	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
12100	25284		2.21	0.0E+00	10082587	NT	Homo sapiens nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 2 (NFATC2), mRNA
12126	13318		2.04	0.0E+00	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
12218	25198	30814	2.63	0.0E+00	AW590082.1	EST_HUMAN	hg31e06.x1 NCI_CGAP_G08 Homo sapiens cDNA clone IMAGE:2947234 3' similar to contains A1u repetitive element; contains element MER22 repetitive element;
12229	25248		1.34	0.0E+00	BE060210.1	EST_HUMAN	RC8-BT0711-200300-011-D05 BT0711 Homo sapiens cDNA
12273	25258		4.43	0.0E+00	AF068757.1	NT	Homo sapiens somatostatin receptor subtype 3 (SSTR3) gene, 5' flanking region and partial cds
12308	24732		3.38	0.0E+00	0635487	NT	Human endogenous retrovirus, complete genome
12351	25252		2.41	0.0E+00	AI204914.1	EST_HUMAN	an05h04.x1 Sitratogene schizo brain S11 Homo sapiens cDNA clone IMAGE:1684759 3'
12363	24776		1.68	0.0E+00	AI904946.1	EST_HUMAN	QV-BT065-020399-103 BT065 Homo sapiens cDNA
12405	14718	27436	1.51	0.0E+00	6912457	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
12405	14718	27437	1.51	0.0E+00	6912457	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
12423	24799	31039	2.08	0.0E+00	AF036365.1	NT	Homo sapiens caveolin-3 (CAV3) mRNA, complete cds
12435	14424	27119	2.76	0.0E+00	H30132.1	EST_HUMAN	y05e08.r1 Soares breast 3NIB-Bat Homo sapiens cDNA clone IMAGE:182246 5' similar to gb:M64099
12435	14424		2.76	0.0E+00	H30132.1	EST_HUMAN	GAMMA-GLUTAMYL-TRANSEPTIDASE 5 PRECURSOR (HUMAN);
12446	24818	27120	10.68	0.0E+00	D50856.1	NT	y05e08.r1 Soares breast 3NIB-Bat Homo sapiens cDNA clone IMAGE:182246 5' similar to gb:M64099
12448	24818	31020	2.61	0.0E+00	11418189	NT	GAMMA-GLUTAMYL-TRANSEPTIDASE 5 PRECURSOR (HUMAN);
12448	24818	31021	2.51	0.0E+00	11418189	NT	Human gamma-cytoplasmic actin (ACTGP8) pseudogene
12464	14817	27549	1.53	0.0E+00	4758489	NT	Homo sapiens thyroid autoantigen 70kD (Ku antigen) (G22P1), mRNA
12502	24859		1.5	0.0E+00	AW064698.1	EST_HUMAN	Homo sapiens GTP binding protein 1 (GTPBP1) mRNA
12538	13953	26617	2.09	0.0E+00	8922693	NT	h88e08.x1 Soares NFL_T-GBC S1 Homo sapiens cDNA clone IMAGE:2879154 3'
12544	24894		1.88	0.0E+00	11526291	NT	Homo sapiens hypothetical protein FLJ10997 (FLJ10997), mRNA
12568	16089	28718	4.24	0.0E+00	4885312	NT	Homo sapiens hypothetical protein FLJ20454 (FLJ20454), mRNA
							Homo sapiens G protein-coupled receptor 24 (GPR24), mRNA

Table 4  
Single Exon Probes Expressed In Brain

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
12576	17905	30592	3.06	0.0E+00	6806918	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
12582	24905		2.12	0.0E+00	AB029600.1	NT	Homo sapiens CST gene for carboxypeptidase, exon 1, 2, 3, 4, 5
12622	24927	31009	2.06	0.0E+00	9558724	NT	Homo sapiens cleavage and polyadenylation specific factor 1, 180kD subunit (CPSF1), mRNA
12648	25410		2.66	0.0E+00	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
12654	13390	26021	2.77	0.0E+00	6806918	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
12728	24989	30972	1.5	0.0E+00	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
12735	25004		4	0.0E+00	7657020	NT	Homo sapiens DKFZp434P211 protein (DKFZP434P211), mRNA
12780	25042	30987	1.78	0.0E+00	AW025032.1	EST_HUMAN	wu83c07.x1 NCJ CGAP_K03 Homo sapiens cDNA clone IMAGE:2527590 3' similar to TR:Q12844 Q12844 BREAKPOINT CLUSTER REGION PROTEIN ;contains TAR1.8 TAR1 repetitive element ;
12808	13890	26550	1.37	0.0E+00	9906844	NT	Homo sapiens chromosome 12 open reading frame 3 (C12ORF3), mRNA
12818	25251		1.39	0.0E+00	AF083824.1	NT	Homo sapiens dihydropyridine receptor alpha 2 subunit (CACNA2D1) gene, exon 8



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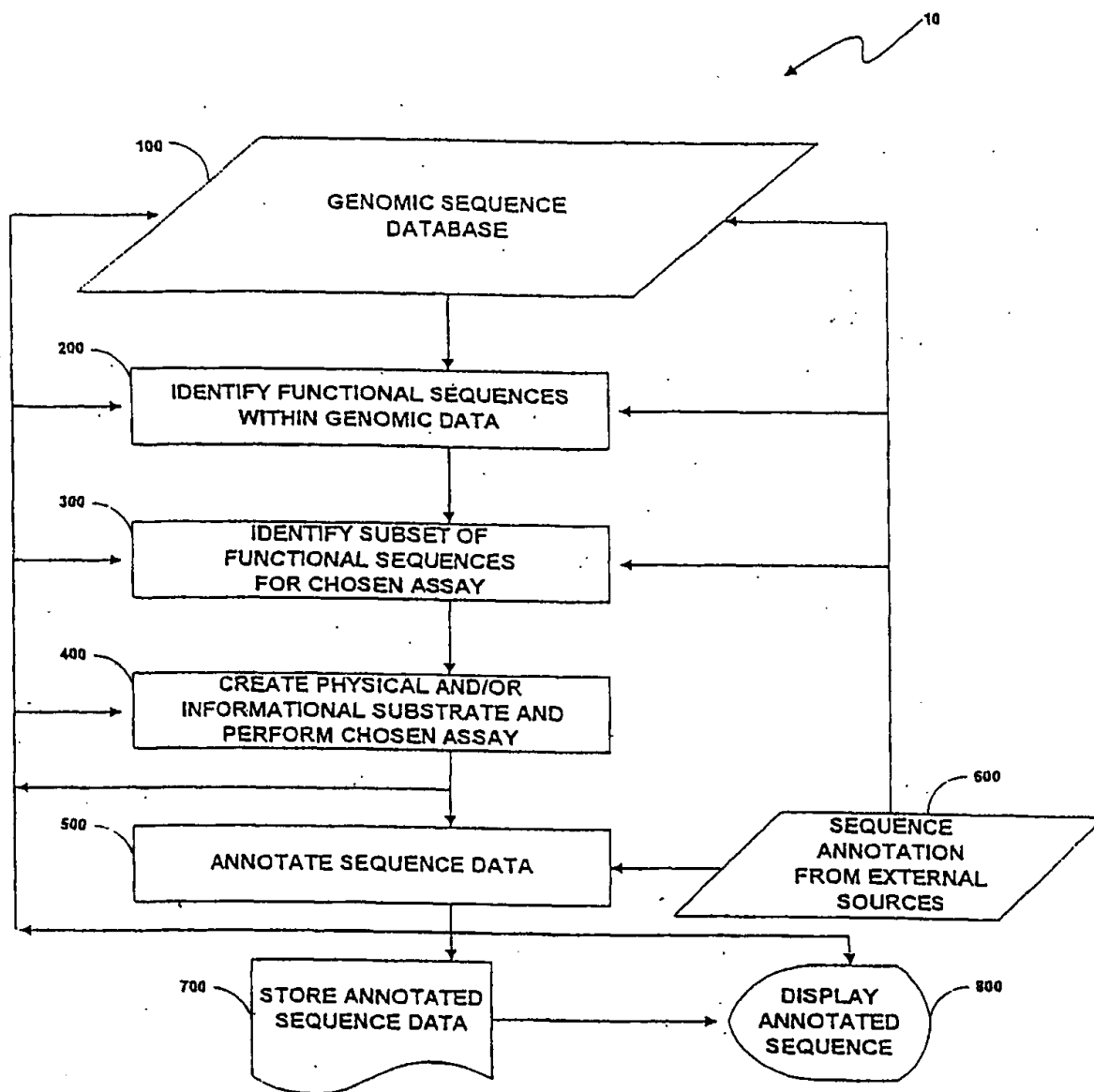


Fig. 1

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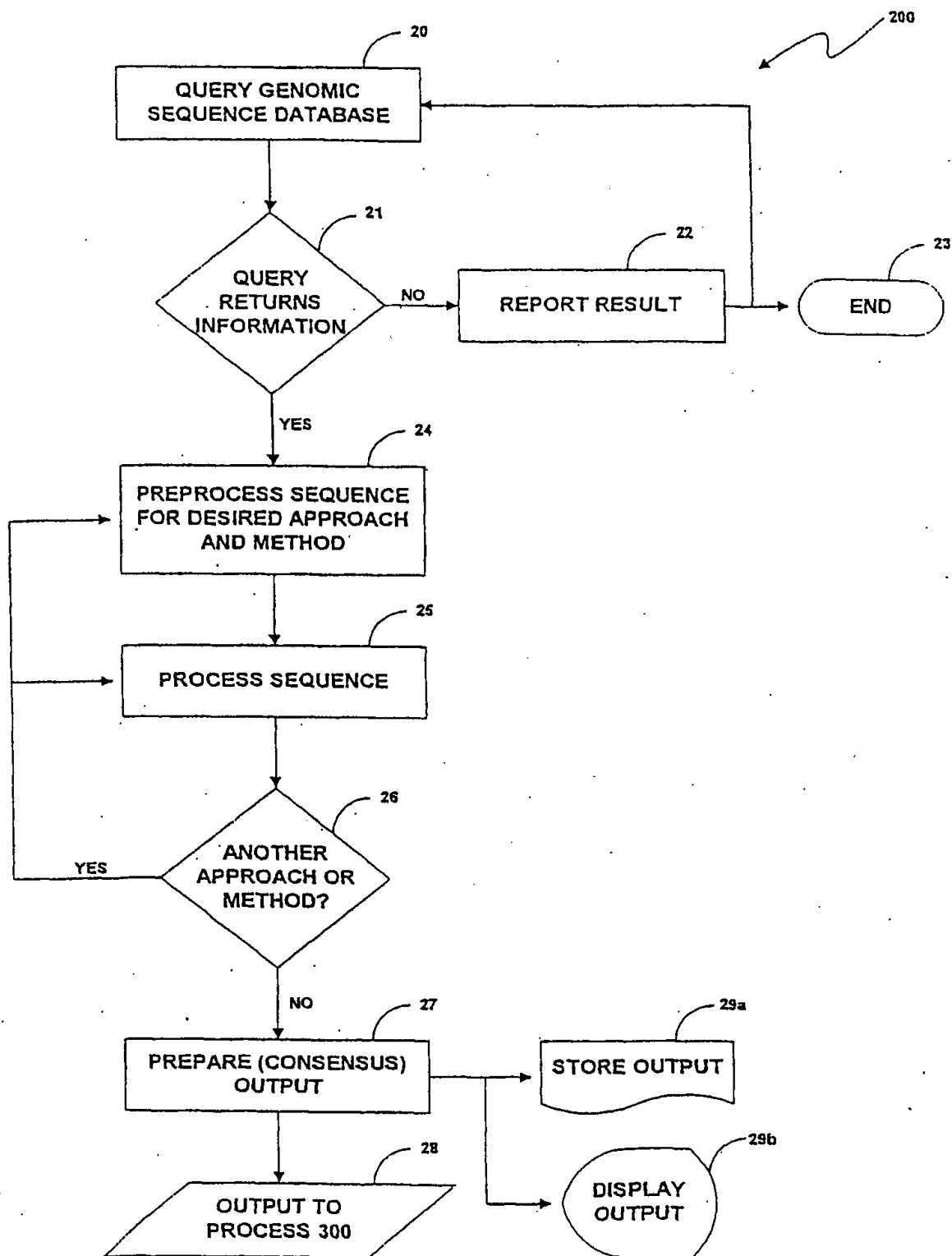


Fig. 2



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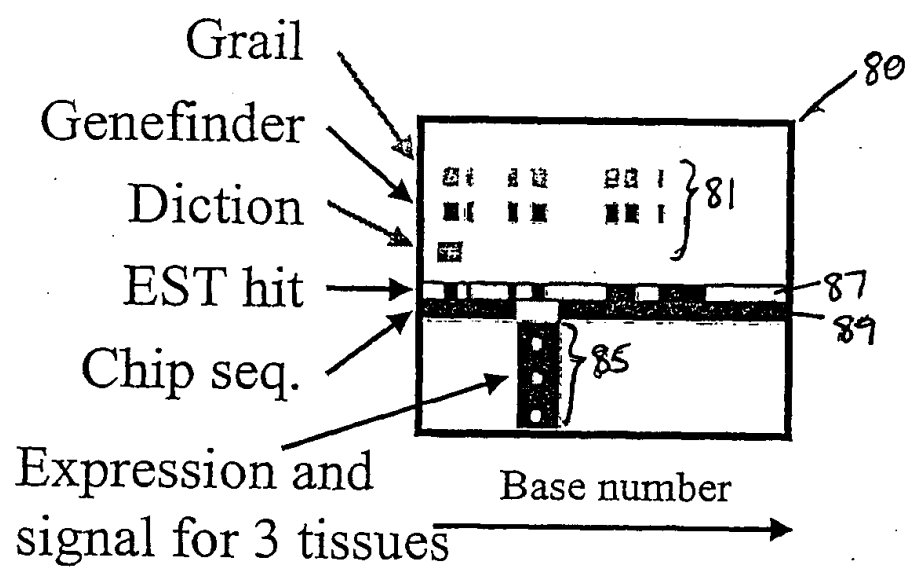


Fig. 4

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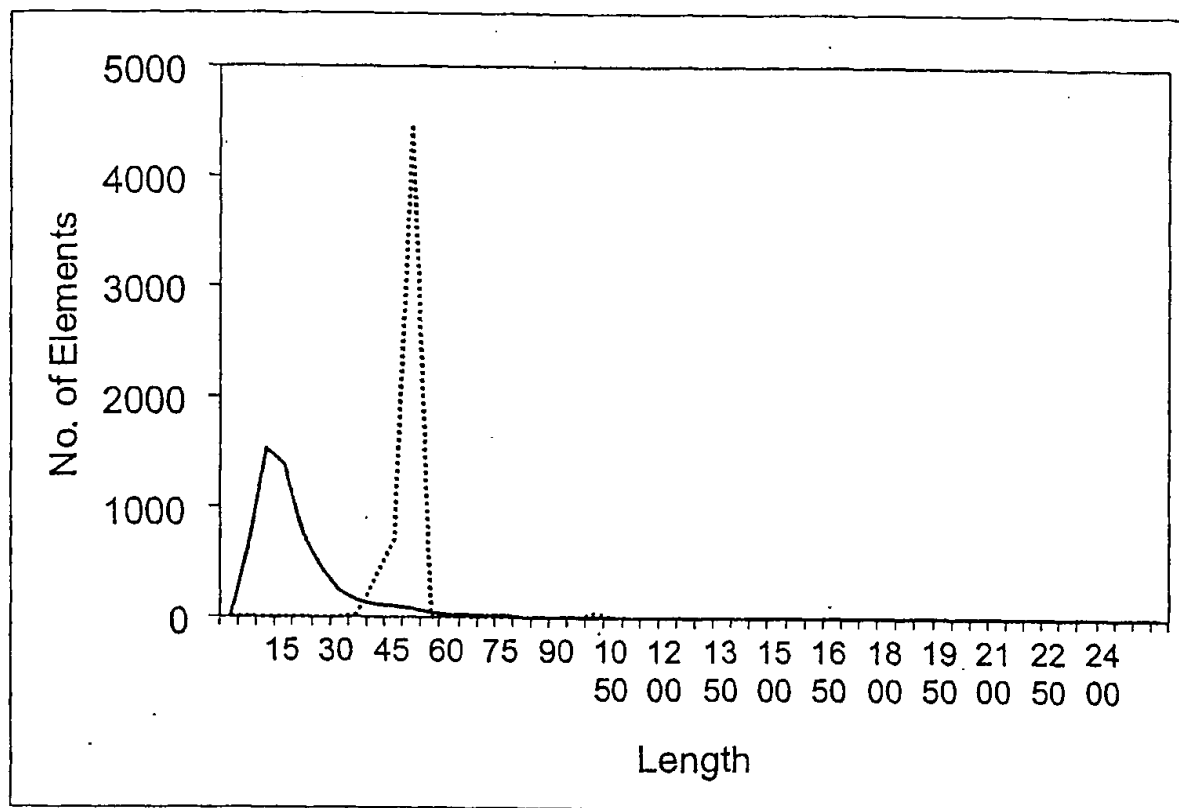


Fig. 5

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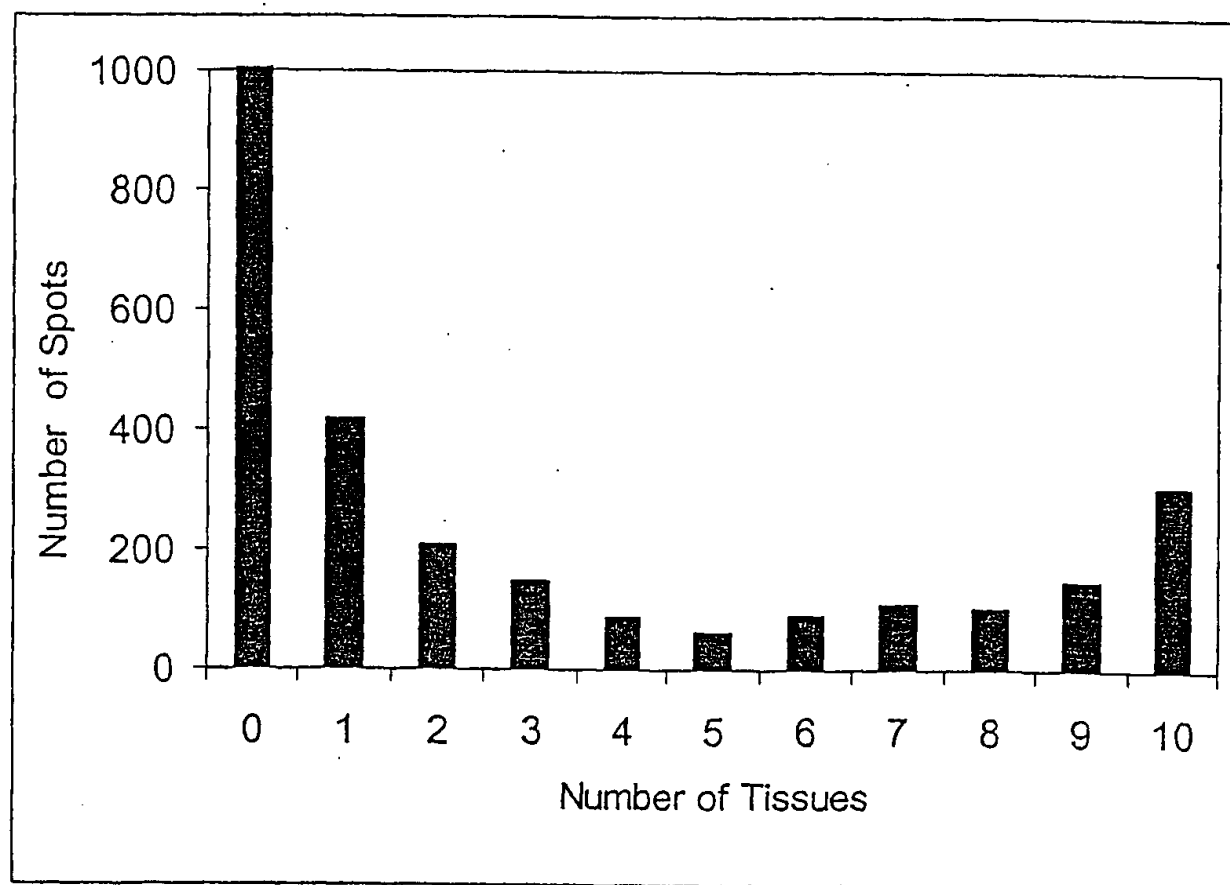


Fig. 6

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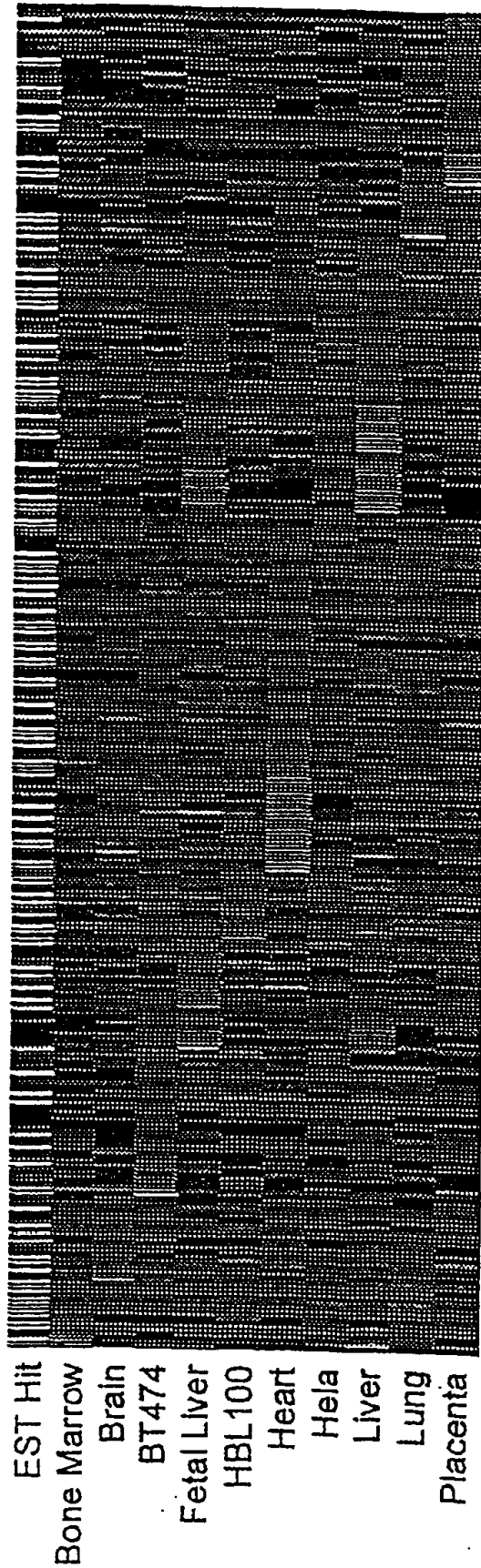


Fig. 7a

ratio legend

>9  
8  
7  
6  
5  
4  
3  
2  
1



Fig. 7b

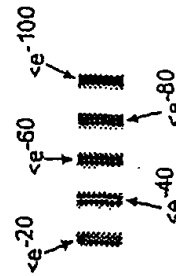


Fig. 7c

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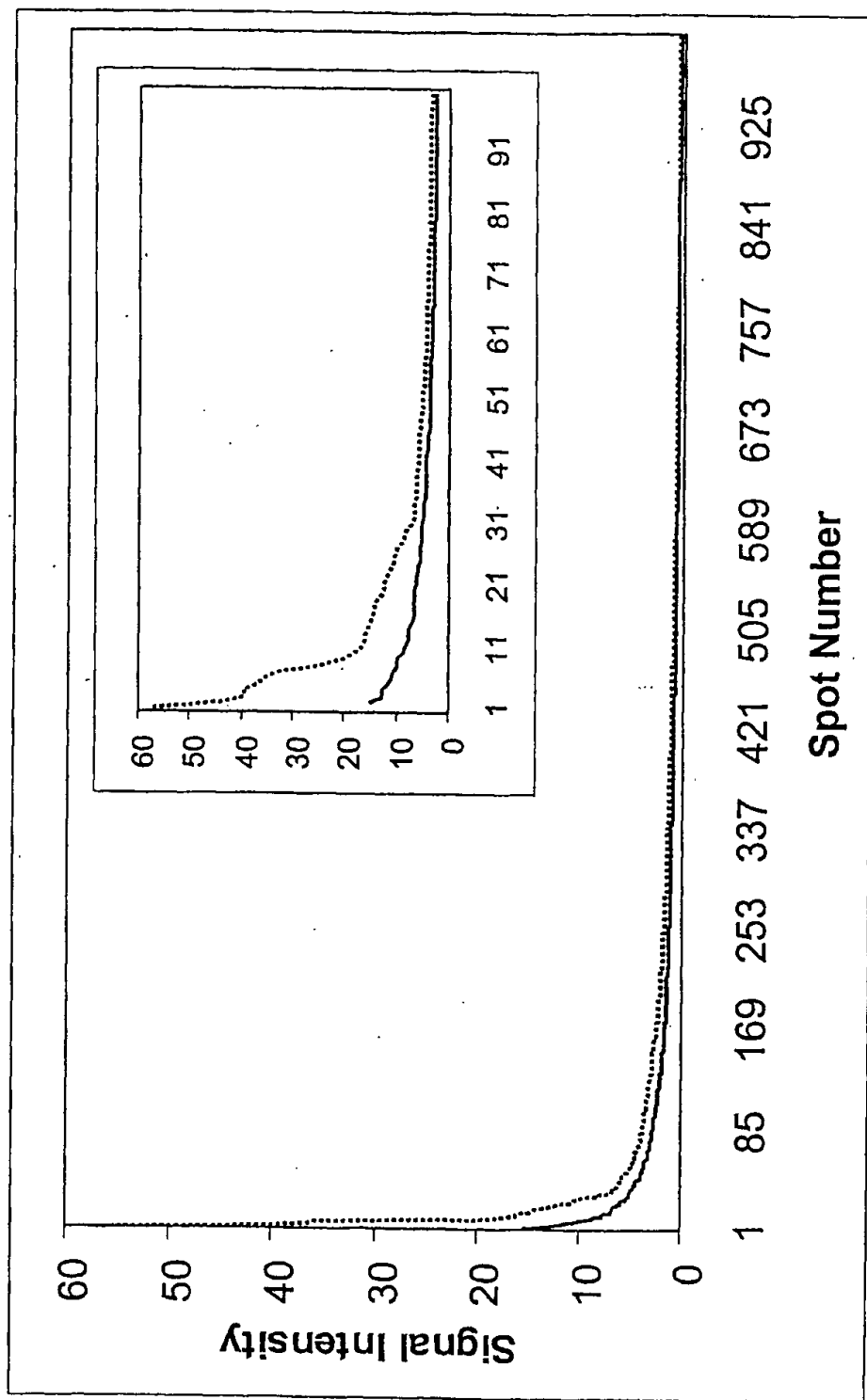


Fig. 8



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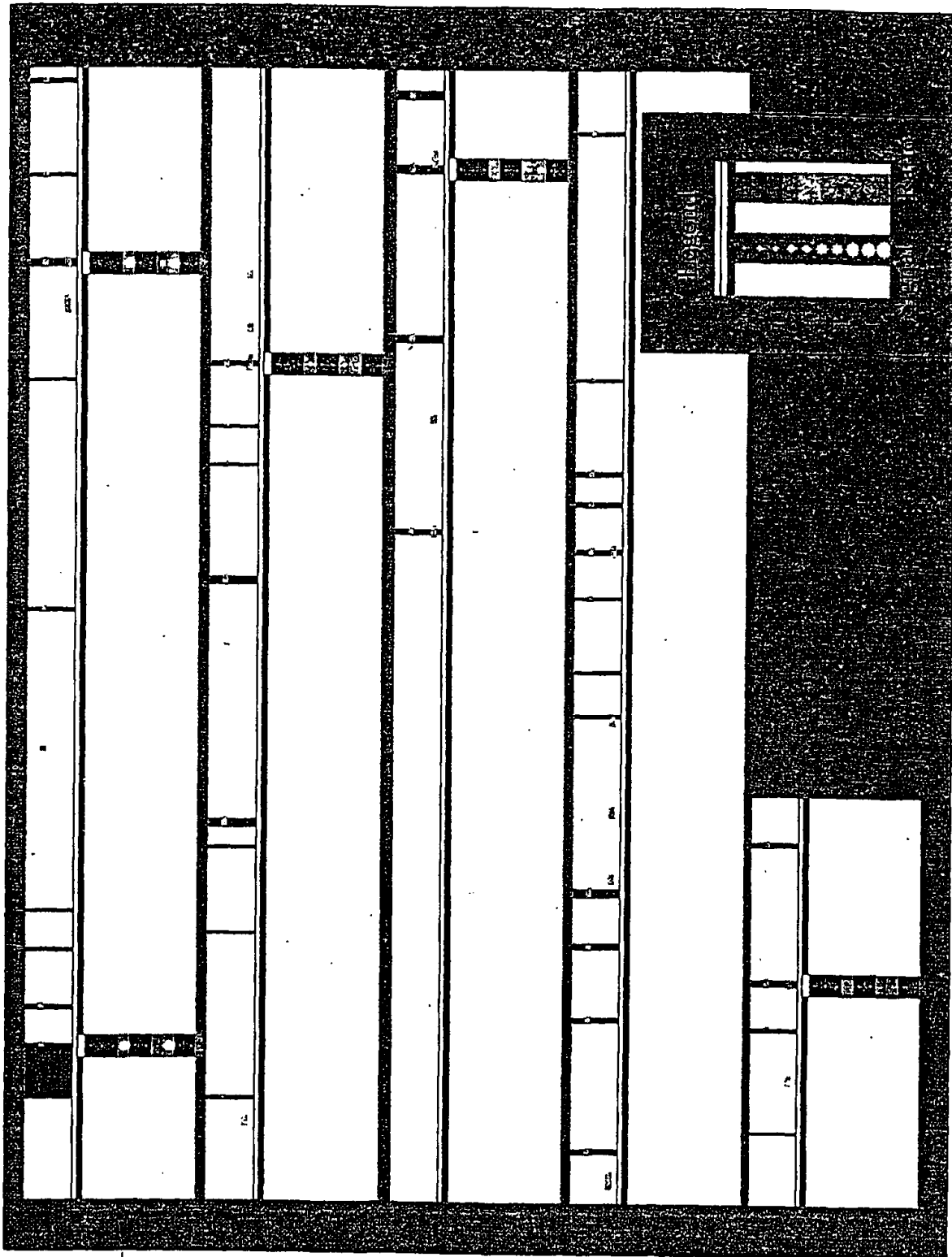
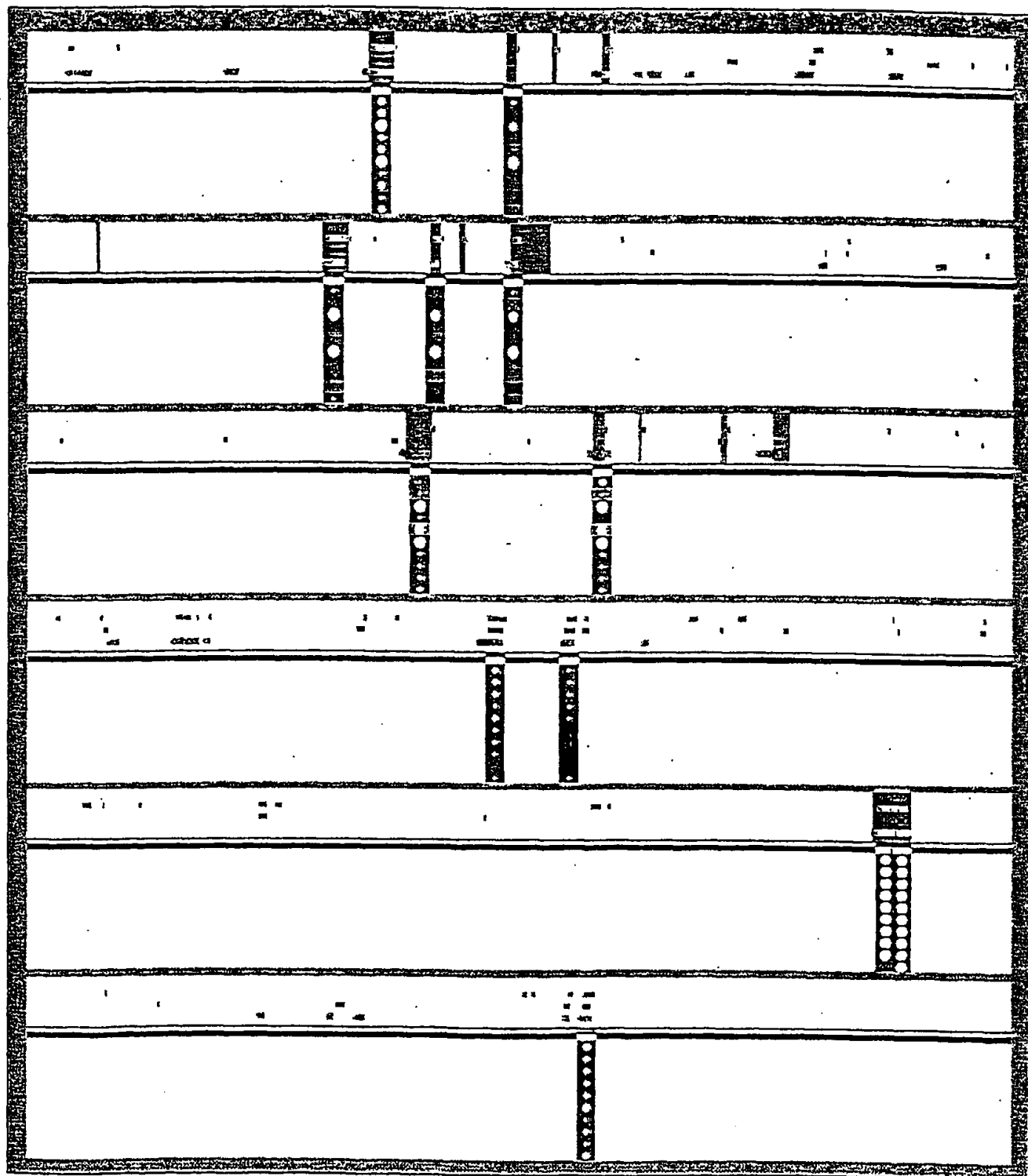


Fig. 9

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Fig. 10



(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
9 August 2001 (09.08.2001)

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(10) International Publication Number  
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- (21) International Application Number: PCT/US01/00667
- (22) International Filing Date: 30 January 2001 (30.01.2001)
- (25) Filing Language: English
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|------------|--------------------------------|----|
| 60/180,312 | 4 February 2000 (04.02.2000)   | US |
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| 09/608,408 | 30 June 2000 (30.06.2000)      | US |
| 09/632,366 | 3 August 2000 (03.08.2000)     | US |
| 60/234,687 | 21 September 2000 (21.09.2000) | US |
| 60/236,359 | 27 September 2000 (27.09.2000) | US |
| 0024263.6  | 4 October 2000 (04.10.2000)    | GB |
- (71) Applicant (for all designated States except US): AEOM-ICA, INC. [US/US]; 928 East Arques Avenue, Sunnyvale, CA 94085 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): PENN, Sharron, G. [GB/US]; 617 South Delaware Street, San Mateo, CA 94402 (US). HANZEL, David, K. [US/US]; 988 Loma Verde Avenue, Palo Alto, CA 94303 (US). CHEN, Wen-sheng [CN/US]; 210 Easy Street #25, Mountain View, CA 94043 (US). RANK, David, R. [US/US]; 117 El Dorado Commons, Fremont, CA 94539 (US).
- (74) Agent: RONNING, Royal, N., Jr.; Amersham Pharmacia Biotech, Inc., 800 Centennial Avenue, Piscataway, NJ 08855 (US).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).
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see PCT Gazette No. 42/2002 of 17 October 2002, Section II
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR ANALYSIS OF GENE EXPRESSION IN HUMAN BRAIN

(57) Abstract: A single exon nucleic acid microarray comprising a plurality of single exon nucleic acid probes for measuring gene expression in a sample derived from human brain is described. Also described are single exon nucleic acid probes expressed in the brain and their use in methods for detecting gene expression.



WO 01/057275 A3

<b>A. CLASSIFICATION OF SUBJECT MATTER</b> IPC 7 C12Q1/68 G06F19/00 C07K14/47		
According to International Patent Classification (IPC) or to both national classification and IPC		
<b>B. FIELDS SEARCHED</b> Minimum documentation searched (classification system followed by classification symbols) IPC 7 C12Q C07K		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data, PAJ, MEDLINE, EMBASE, CHEM ABS Data, EMBL, BIOSIS, INSPEC		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DATABASE EMBL 'Online! ID:AC007372, April 1999 (1999-04) DICKHOFF ET AL.: "Homo sapiens chromosome 14 BAC containing gene for type 2 iodothyronine deiodinase (DIO2) gene" XP002186078	13-21,25
Y	abstract	1-12, 22-24, 26,27
X	DATABASE EMBL 'Online! ID:CNS0000F, 11 May 1999 (1999-05-11) HEILIG ET AL.: "Sequencing of the human chromosome 14" XP002186079	13-21,25
Y	abstract	1-12, 22-24, 26,27
-/-		
<input checked="" type="checkbox"/> Further documents are listed in the continuation of box C. <input checked="" type="checkbox"/> Patent family members are listed in annex.		
* Special categories of cited documents : <div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier document but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> </div> <div style="width: 48%;"> <p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</p> <p>"&amp;" document member of the same patent family</p> </div> </div>		
Date of the actual completion of the international search  <div style="text-align: center; font-size: 1.2em;">26 September 2002</div>		Date of mailing of the international search report  <div style="text-align: center; font-size: 1.2em;">08. 10. 2002</div>
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016		Authorized officer  <div style="text-align: center; font-size: 1.2em;">Hagenmaier, S</div>

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DATABASE EMBL 'Online! ID: A0750225, 20 July 1999 (1999-07-20) MAHAIRAS ET AL.: "Construction of a Characterized Clone Resource for Genomic Sequencing" XP002186080	13-21,25
Y	abstract	1-12, 22-24, 26,27
Y	WO 98 30722 A (MACK DAVID H) 16 July 1998 (1998-07-16)  the whole document	1-12, 22-24, 26,27
Y	WO 99 67422 A (SMITHKLINE BEECHAM CORP ;LEARY JEFFREY J (US); TAL SINGER RUTH (US) 29 December 1999 (1999-12-29) the whole document	1-12, 22-24, 26,27
Y	BURGE C ET AL: "Prediction of complete gene structure in human genomic DNA" JOURNAL OF MOLECULAR BIOLOGY, LONDON, GB, vol. 268, no. 1, 25 April 1997 (1997-04-25), pages 78-94, XP002109301 ISSN: 0022-2836 the whole document	1-12, 22-24, 26,27
Y	CHURCH D M ET AL: "ISOLATION OF GENES FROM COMPLEX SOURCES OF MAMMALIAN GENOMIC DNA USING EXON AMPLIFICATION" NATURE GENETICS, NEW YORK, NY, US, vol. 6, 1994, pages 98-105, XP000608940 ISSN: 1061-4036 the whole document	1-12, 22-24, 26,27
Y	TAKAHASHI N ET AL: "High-density cDNA filter analysis of the expression profiles of the genes preferentially expressed in human brain" GENE, ELSEVIER BIOMEDICAL PRESS. AMSTERDAM, NL, vol. 164, no. 2, 27 October 1995 (1995-10-27), pages 219-227, XP004041878 ISSN: 0378-1119 the whole document	1-12, 22-24

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	YASOJIMA K ET AL: "TANGLED AREAS OF ALZHEIMER BRAIN HAVE UPREGULATED LEVELS OF EXON 10 CONTAINING TAU MRNA" BRAIN RESEARCH, AMSTERDAM, NL, vol. 831, no. 1/2, 1999, pages 301-305, XP000929899 ISSN: 0006-8993 the whole document	1-12, 22-24
Y	ERMAK G ET AL: "RESTRICTED PATTERNS OF CD44 VARIANT EXON EXPRESSION IN HUMAN PAPILLARY THYROID CARCINOMA" CANCER RESEARCH, AMERICAN ASSOCIATION FOR CANCER RESEARCH, BALTIMORE, MD, US, vol. 56, no. 1, 1 March 1996 (1996-03-01), pages 1037-1042, XP002063388 ISSN: 0008-5472 the whole document	1-12, 22-24

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US 01/00667

## Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
2. ☒ Claims Nos.: 1-24,26 (partially)  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:  
see FURTHER INFORMATION sheet PCT/ISA/210
  
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
  
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
  
3. ☒ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:  
1-27 (all partially)
  
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Claims Nos.: 1-24,26 (partially)

The following statements about the impossibility of performing a meaningful search according to Art. 17(2) PCT are made for the subject matter for which a search has been performed and identified as the first invention in form 206 PCT. If additional fees are paid for the (one or more) as yet unsearched inventions, similar statements about incomplete searches could be issued.

Present claims 1-12 and 22-24 relate to an extremely large number of possible sets of nucleic acid probes comprising Seq.Id. 1 or 2 as well as microarrays comprising said sets. In fact, the claims contain so many possible permutations that a lack of clarity and conciseness within the meaning of Article 6 PCT arises to such an extent as to render a meaningful search of the claims impossible. Consequently, the search for the sets of probes comprising Seq. Id. 1 or 2 has been limited to the Seq. Id. as such.

Claims 1-3, 5, 6, 8-15 and 18-24 relate to portions or fragments of nucleic acids defined by Seq. Id. 1 or 2. The length or other similar characterizing features of the portions or fragments is not disclosed, bringing the total number of possible prior art sequences to exceptionally high numbers. The shorter the length, the higher the possibility that an overflow of, in principle unrelated, sequences are retrieved, making the establishment of a meaningful International Search Report impossible. For this reason the search has been limited to portions or fragments of Seq. Id. 1 or 2 having a significant minimum length and being supported by the description, namely at least 15 contiguous nucleotides (see claim 16).

Claims 15-21 relate to an extremely large number of nucleic acid probes. The probes are defined solely by their potential to code for peptide Seq. Id. 25443. However, due to the degeneracy of the genetic code, every peptide is potentially coded by an extremely high number of nucleic acid sequences. In fact, the claims contain so many potential nucleic acid sequences that a lack of clarity and conciseness within the meaning of Article 6 PCT arises to such an extent as to render a meaningful search over the whole scope of the claims impossible. The search has therefore been carried out for those parts of the claims which do appear to be clear and concise, namely the nucleic acid sequences disclosed in the application and identified as encoding the referred peptide in table 4 (Seq. Ids. 1 or 2 and 12830).

Likewise, claim 26, which refers to peptides encoded by Seq. Ids. 1 or 2 and 12830, encompasses a high and undefined number of possible peptides. Besides three possible reading frames deriving from the encoding nucleic acid strand, as well as three additional reading frames deriving from the complementary nucleic acid strand, every possible fragment of these is being covered by the claim. This is due to the potential presence of stop codons within any of the six possible reading frames which can not be established a priori. Thus, claim 26 contains so many potential peptide



## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

sequences that a lack of clarity and conciseness within the meaning of Article 6 PCT arises to such an extent as to render a meaningful search over the whole scope of the claim impossible. Consequently, the search has been carried out for those parts of the claim which do appear to be clear and concise, namely the peptide disclosed, identified by Seq. Id. 25443.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 9830722	A	16-07-1998	AU 6035698 A	03-08-1998
			EP 0973939 A1	26-01-2000
			JP 2001508303 T	26-06-2001
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			US 2002028454 A1	07-03-2002
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WO 9967422	A	29-12-1999	CA 2330731 A1	29-12-1999
			EP 1090144 A1	11-04-2001
			JP 2002518064 T	25-06-2002
			WO 9967422 A1	29-12-1999
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